Volume III

July 2002

The Washington State Department of Health



1996-1998 Surveillance Report

Selected Maternal Risk Factors Discussed by Prenatal Health Care Providers



1996-1998 Washington State Pregnancy Risk Assessment Monitoring System (PRAMS) Surveillance Report

July 2002

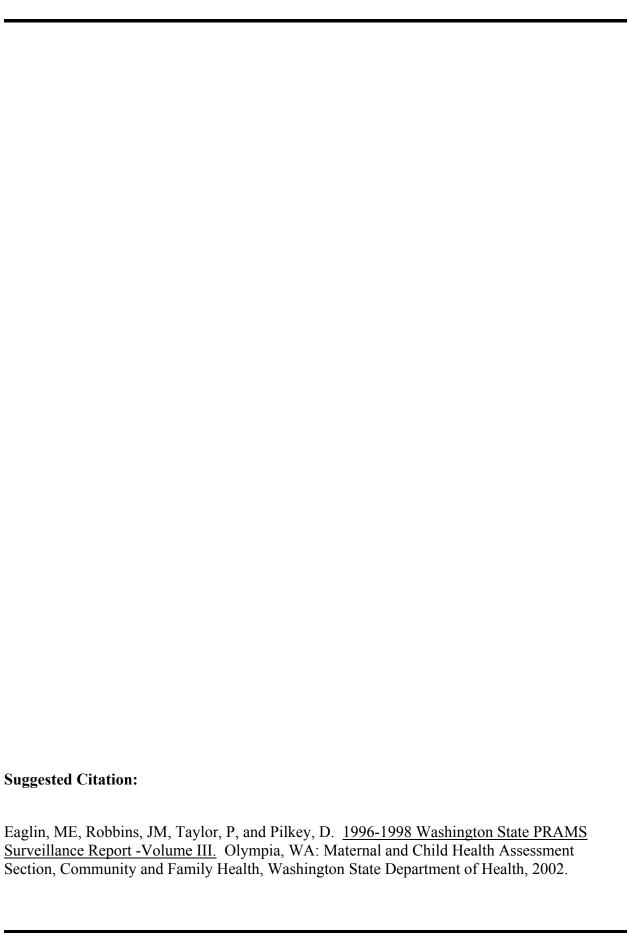


Community and Family Health

For additional information on Washington State PRAMS or to receive additional hard copies or an electronic copy of the 1996-1998 Washington State PRAMS Surveillance Report – Volume III, please contact:

PRAMS Coordinator Community and Family Health P.O. Box 47835 Olympia, WA 98504-7835 (360) 236-3576

E-Mail: WAPRAMS@doh.wa.gov



Acknowledgements

Margaret Eaglin, MPH Jeanette Robbins, BA

Diane Bailey, MN
Tom Bell, PhD
Sherilynn Casey, MPA
Isela Cooper
Judith Leconte, MSW
Linda Lohdefinck, BS
Rebecca Peters, MA, LMHC
Diane Pilkey, RN, MPH
Polly Taylor, CNM, MPH, ARNP
Terese Vollan, BS, BA
Cathy Wasserman, PhD
Jeanette Zaichkin, RNC, MN

Members of the:

Washington State Department of Health
Maternal and Child Health (MCH)
Infectious Disease and Reproductive Health (IDRH)
Center for Health Statistics (CHS)
Women, Infants, and Children (WIC)

Washington State Department of Social and Health Services

First Steps Database Research and Data Analysis Division

Snohomish Health District

Health Statistics and Assessment Programs

Public Health -- Seattle and King County

Planning and Evaluation Unit

Funding for the PRAMS Program is provided in part by the Centers for Disease Control and Prevention Program, Atlanta, Georgia, (Grant Number: U50/CCU013484-06).

The Washington State PRAMS committee members would like to especially thank the Washington mothers who participated in the survey.

TABLE OF CONTENTS

	Page
Executive Summary	1
Data Highlights	3
1. Introduction	5
2. Selected Maternal Risk Factors Discussed by Prenatal Health Care Providers	
☐ Background and References	11
☐ Nutritional Intake during Pregnancy	13
☐ Fetal Effects of Smoking	17
☐ Breast-feeding	21
☐ Fetal Effects of Alcohol Use	25
☐ Seat Belt Use during Pregnancy	29
☐ Postpartum Birth Control Methods	33
☐ Safe Medication Intake during Pregnancy	37
☐ Fetal Effects of Illegal Drug Use	41
☐ Growth and Development of Baby during Pregnancy	45
☐ Early Labor	49
☐ HIV Prevention	53
☐ HIV Testing	57
☐ Physical Abuse by Husband or Partner	61
☐ Postpartum Depression	65
☐ Weight Gain during Pregnancy	69
☐ Family History of Diseases or Birth Defects	73
☐ Testing for Birth Defects or Genetic Diseases during Pregnancy	77

3. Appendices

☐ Appendix A. Data Collection	83
☐ Appendix B. Sampling and Weighting Process	89
☐ Appendix C. Technical Notes	95

List of Data Tables and Figures

1. In	troduction	Page
	Table 1.1: Demographic Characteristics of Washington State Resident Birth Mothers, Washington State PRAMS 1996-1998	1
	elected Maternal Risk Factors Discussed by Prenatal th Care Providers	
Nutr	itional Intake during Pregnancy	
	Table 2.1: Women who reported a prenatal health care provider discussed what foods should be eaten during pregnancy, Washington State PRAMS 1996-1998	14
	Figure 2.1: Women who reported a prenatal health care provider discussed what foods should be eaten during pregnancy, Washington State PRAMS 1996-1998	15
Feta	I Effects of Smoking	
	Table 2.2: Women who reported a prenatal health care provider discussed how smoking during pregnancy could affect the baby, Washington State PRAMS 1996-1998	18
	Figure 2.2: Women who reported a prenatal health care provider discussed how smoking during pregnancy could affect the baby, Washington State PRAMS 1996-1998	19
Brea	st-feeding	
	Table 2.3: Women who reported a prenatal health care provider discussed breast-feeding, Washington State PRAMS 1996-1998	22
	Figure 2.3: Women who reported a prenatal health care provider discussed breast-feeding, Washington State PRAMS 1996-1998	23

Fetal Effects of Alcohol Use

		Table 2.4: Women who reported a prenatal health care provider discussed how drinking alcohol during pregnancy could affect the baby, Washington State PRAMS 1996-1998	26
		Figure 2.4: Women who reported a prenatal health care provider discussed how drinking alcohol during pregnancy could affect the baby, Washington State PRAMS 1996-1998	27
S	eat	Belt Use during Pregnancy	
		Table 2.5: Women who reported a prenatal health care provider discussed seat belt use during pregnancy, Washington State PRAMS 1996-1998	30
		Figure 2.5: Women who reported a prenatal health care provider discussed seat belt use during pregnancy, Washington State PRAMS 1996-1998	31
P	ost	partum Birth Control Methods	
		Table 2.6: Women who reported a prenatal health care provider discussed birth control methods to use after pregnancy, Washington State PRAMS 1996-1998.	34
		Figure 2.6: Women who reported a prenatal health care provider discussed birth control methods to use after pregnancy, Washington State PRAMS 1996-1998.	35
Sa	afe	Medications Intake during Pregnancy	
		Table 2.7: Women who reported a prenatal health care provider discussed the kinds of medicines that were safe to take during pregnancy, Washington State PRAMS 1996-1998	38
		Figure 2.7: Women who reported a prenatal health care provider discussed the kinds of medicines that were safe to take during pregnancy, Washington State PRAMS 1996-1998	39

Fetal Effects of Illegal Drug Use

		Table 2.8: Women who reported a prenatal health care provider discussed about how using illegal drugs could affect the baby, Washington State PRAMS 1996-1998	42
		Figure 2.8: Women who reported a prenatal health care provider discussed about how using illegal drugs could affect the baby, Washington State PRAMS 1996-1998	43
G	rov	vth and Development of Baby during Pregnancy	
		Table 2.9: Women who reported a prenatal health care provider discussed the growth and development of the baby during pregnancy, Washington State PRAMS 1996-1998	46
		Figure 2.9: Women who reported a prenatal health care provider discussed the growth and development of the baby during pregnancy, Washington State PRAMS 1996-1998	47
Εą	arly	/ Labor	
		Table 2.10: Women who reported a prenatal health care provider discussed what to do if labor starts early, Washington State PRAMS 1996-1998	50
		Figure 2.10: Women who reported a prenatal health care provider discussed what to do if labor starts early, Washington State PRAMS 1996-1998	51
HI	IV F	Prevention	
		Table 2.11: Women who reported a prenatal health care provider discussed how to keep from getting HIV (the virus that causes AIDS), Washington State PRAMS 1996-1998	54
		Figure 2.11: Women who reported a prenatal health care provider discussed how to keep from getting HIV (the virus that causes AIDS), Washington State PRAMS 1996-1998	55
			U

HIV Testing

		Table 2.12: Women who reported a prenatal health care provider discussed getting a blood test for HIV (the virus that causes AIDS), Washington State PRAMS 1996-1998	58
		Figure 2.12: Women who reported a prenatal health care provider discussed getting a blood test for HIV (the virus that causes AIDS), Washington State PRAMS 1996-1998	59
Ph	ys	ical Abuse by a Husband or Partner	
		Table 2.13: Women who reported a prenatal health care provider discussed physical abuse to women by their husbands or partners, Washington State PRAMS 1996-1998	62
		Figure 2.13: Women who reported a prenatal health care provider discussed physical abuse to women by their husbands or partners, Washington State PRAMS 1996-1998	63
Po	stį	partum Depression	
		Table 2.14: Women who reported a prenatal health care provider discussed "baby blues" or postpartum depression, Washington State PRAMS 1996-1998	66
		Figure 2.14: Women who reported a prenatal health care provider discussed "baby blues" or postpartum depression, Washington State PRAMS 1996-1998	67
We	eig	ht Gain during Pregnancy	
		Table 2.15: Women who reported a prenatal health care provider discussed weight gain during pregnancy, Washington State PRAMS 1996-1998	70
		Figure 2.15: Women who reported a prenatal health care provider discussed weight gain during pregnancy, Washington State PRAMS 1996-1998	71
Fa	mi	ly History of Diseases or Birth Defects	
		Table 2.16: Women who reported a prenatal health care provider discussed diseases or birth defects that could run in their family or their husband or partner's family, Washington State PRAMS 1996-1998	74
		Figure 2.16: Women who reported a prenatal health care provider discussed diseases or birth defects that could run in their family or their husband or partner's family, Washington State PRAMS 1996-1998	75

Testing for Birth Defects or Genetic Diseases during Pregnancy

☐ Table 2.17: Women who reported a prenatal health care provider discussed getting a test for birth defects or genetic diseases during pregnancy, Washington State PRAMS 1996-1998	78
☐ Figure 2.17: Women who reported a prenatal health care provider discussed getting a test for birth defect or genetic disease during pregnancy, Washington State PRAMS 1996-1998	79
3. Appendices	
Appendix B: Sampling and Weighting Process	
☐ Table 3.1: Survey Response Rates, Washington State PRAMS 1996-1998	93

Executive Summary

Since June of 1993, the Office of Maternal and Child Health (MCH), Washington State Department of Health (DOH) has been collecting Pregnancy Risk Assessment Monitoring System (PRAMS) data.¹ PRAMS is an ongoing, population-based surveillance system sponsored by the Centers for Disease Control and Prevention (CDC) and designed to generate state-specific data on maternal behaviors and experiences before, during, and after pregnancy among residents who delivered live-born infants.² We are pleased to present the third of four volumes of the 1996-1998 Washington State PRAMS surveillance report, a collection of PRAMS findings on various MCH indicators.

Volume Three of the 1996-1998 Washington State PRAMS Surveillance report provides information on MCH indicators relative to selected topics discussed by prenatal care providers. Subgroup analyses are stratified by selected maternal characteristics; results from these analyses are displayed in graphic and tabular form. For certain topics, 5-year trends are also presented.

The 1996-1998 Washington State PRAMS Surveillance Report was designed to serve as a descriptive review of the pregnancy and early postpartum experience of 6,034 women in Washington State who had live births from April 1996 through December 1998. The average response rate for this study period was approximately 70 percent, which is considered by PRAMS operational and technical staff at the CDC as a minimum threshold below which unacceptable response bias may occur. When a response rate drops below this threshold, state data are not included in national estimates. This report will also serve as a source of information for public health professionals and policy makers in developing and monitoring programs and policies designed to improve the health of mothers and children in Washington State.

References:

¹ <u>Pregnancy Risk Assessment Monitoring System (PRAMS) Surveillance Report: 1993-1994</u>. Maternal and Child Health Assessment Section, Community and Family Health, Washington State Department of Health, 1996.

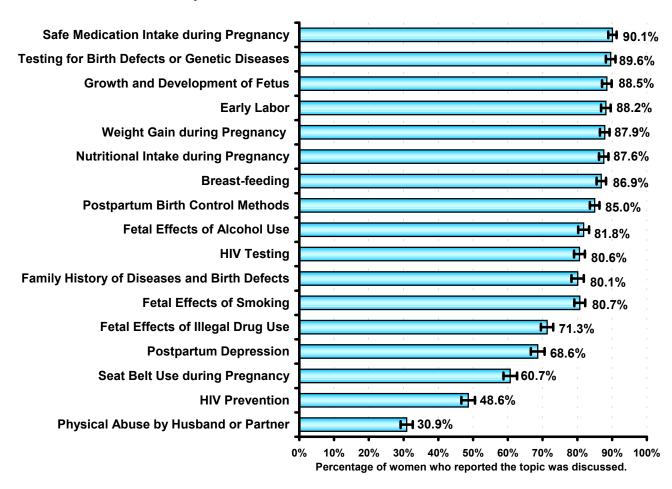
² Colley GB, Johnson CH, Morrow B, Ahluwalia IB, Gaffield ME, Fischer L, Rogers M, Whitehead N. <u>PRAMS</u> 1997 Surveillance Report. Atlanta, GA: Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 1999.

Data Highlights

The following are key findings on selected topics discussed by prenatal care providers featured in Volume III of the 1996-1998 Washington State PRAMS Surveillance Report:

- ☐ The most common topic discussed by prenatal health care providers was safe medication intake during pregnancy (90.1%).
- ☐ The least common topics discussed by prenatal health care providers were fetal effects of illegal drug use during pregnancy (71.3%), postpartum depression (68.6%), seatbelt use (60.7%), HIV prevention (48.6%), and physical abuse by a husband or partner (30.9%).

Selected Maternal Risk Factors Discussed By Prenatal Health Care Providers





Introduction

The Pregnancy Risk Assessment Monitoring System (PRAMS) is part of the Centers for Disease Control and Prevention (CDC) initiative to reduce infant mortality and low birth weight. PRAMS is an ongoing, population-based surveillance system administered by the Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion at the CDC in conjunction with various state programs. In 1987, PRAMS was designed to identify and monitor selected self-reported maternal behaviors and experiences that occur before, during and after pregnancy and during the child's early infancy among a stratified sample of mothers delivering a live-born infant. PRAMS was also designed to supplement vital records data and to generate state-specific data for developing and assessing Maternal and Child Health (MCH) programs on a state level.

Since June of 1993, the Office of MCH within the Washington State Department of Health has been collecting PRAMS data. Each month, 1 in 40 births are randomly selected from the Washington State birth certificates. At two to six months postpartum, Washington State PRAMS sends a packet containing an explanatory letter and the PRAMS questionnaire to 100-250 sampled mothers. Ten days after the initial mailing, mothers are sent a reminder letter to serve as a thank you. Mothers who do not respond to the first mailing are sent a second mail questionnaire packet two weeks after the reminder letter. Washington State PRAMS staff contacts the mothers who do not respond to the mail survey two weeks after the second mailing of the questionnaire and attempt to conduct telephone interviews in English or Spanish.^{2,3}

In December of 1996, Washington State published the first PRAMS report that summarized information from mothers who delivered infants in Washington State from April 1993 through December 1994.³ This current report is the third of four volumes of the 1996-1998 Washington State PRAMS Surveillance Report, a compilation of PRAMS data on MCH indicators on 6,034 randomly selected mothers who delivered live born infants in Washington State from April 1996 through December 1998. This sample represents a 70 percent response rate of 8,563 women surveyed during Phase III of the PRAMS survey. For additional information regarding the sampling plan for Washington State PRAMS, please refer to Appendix B.

Volume Three focuses on selected maternal risk factors discussed by prenatal health care providers. This report includes the characteristics of the PRAMS sample population, response rates, data highlights, one narrative section presenting the public health importance of the report, prevalence estimates and subgroup analyses by selected maternal characteristics, and trends. An analysis of each survey question is presented in graphic and tabular form.

For this report, responses to the PRAMS questions are stratified by the following maternal characteristics obtained from the Washington State birth certificates: age at conception (<20, 20-24, 25-34, 35+ years), race/ethnicity (White/Other/Unknown, African American, Native American, Asian/Pacific Islander, and Hispanic ethnicity), level of education at delivery (<12, 12, >12years), marital status at delivery (married, unmarried), and baby's birth weight (< 2500)

grams, \geq 2500 grams). Washington State PRAMS oversampled African Americans, Native Americans, Asian Pacific Islanders, and ethnic Hispanics to create (including whites) five strata. The purpose of oversampling was to increase the reliability of estimates for these minority groups. All women less than 20 years of age were grouped in the same strata due to insufficient numbers to support finer divisions of age groups delineation. The level of education was selected as a stratification variable, because it has been found to be an excellent surrogate for socio-economic status. Table 1.1 (pg. 8) provides the demographic characteristics of the Washington State resident birth mothers for all state births and PRAMS sample participates in this time period.

Information on whether Medicaid paid for prenatal care services for the mother and delivery of the infant was obtained from the linkage between the Washington State PRAMS data and the Washington State First Steps Database (maintained by the Department of Social and Health Services, Research and Data Analysis Division). Women who meet the Medicaid criteria were divided into three groups: Cash Assistance, Pre-First Steps (FS) Medicaid Only, and First Steps Expansion. "Cash Assistance" is defined as very low-income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid. "Pre-First Steps (FS) Medicaid Only" is defined as low-income women (below 90% federal poverty level) eligible for Medicaid only. This group includes women not eligible for cash assistance. "First Steps Expansion" is defined as women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups. "Non-Medicaid recipients" are women not enrolled in Medicaid. For this report, responses to PRAMS questions were stratified by Medicaid total (Cash Assistance, Pre-First Steps (FS) Medicaid Only, and First Steps Expansion) and Non-Medicaid. Information on Medicaid status involvement is important both as an indicator of poverty status and its many attendant health risks, and because the expansion of Medicaid funding for pregnant women in Washington State has been a major component of MCH policy.²

For some topics, responses to PRAMS questions are stratified by site of prenatal care visit (Hospital Clinic, Health Department Clinic, Private Doctor's Office, Military Facility Clinic, Community or Migrant Health Clinic, and Other Clinic). This information is obtained from mother's response to the PRAMS survey question: "Where did you go *most of the time* for the prenatal visits?"

All tables in the report were produced using weighted PRAMS data. Percentages and standard errors were calculated for the characteristic of interest using PROC CROSSTAB in SUDAAN.³ The 95% Confidence Intervals (CIs) were computed using the formula CI = percentage + 1.96 * standard error. The sample size, reported in each table, is the number of mothers who answered the corresponding PRAMS question.

All missing (blank and "don't know") observations are excluded. The percentage of missing values is noted when it equals or exceeds 10 percent. Because estimates based on small sample size are imprecise and may be biased, estimates where the underlying number of respondents was fewer than 60 are noted in the table as "may not be reliable." Respondents fewer than 30 are not reported and are noted in the tables.

Further information on PRAMS can be found in the appendices. Appendix A describes the Washington State PRAMS data collection instrument and procedures. Appendix B explains the Washington State PRAMS sampling and weighting process. Appendix C displays the trend data for questions that were asked in Phase II (January 1994 through March 1996) and Phase III (April 1996 through December 1998) of the PRAMS questionnaire. Appendix D lists the topics for Volume I-IV, the states participating in PRAMS from April 1996 through December 1998, and the web sites to CDC, Washington State PRAMS, and Washington State Department of Health.

This report has been prepared by technical and program staff of the Office of MCH in the Community and Family Health Division at the Washington State Department of Health. It is hoped that the PRAMS data presented in this surveillance report can be used by public health professionals and policy makers to design and implement interventions and policies to improve the long-term health of the mother and children. In addition, this report may also assist in completing the requirements for Title V MCH Block Grant applications, as well as generating hypotheses to be explored in future studies.

References:

¹ <u>Pregnancy Risk Assessment Monitoring System (PRAMS) CDC Model Surveillance Protocol 1999.</u> Maternal and Child Health Assessment Section, Community and Family Health, Washington State Department of Health, 1996.

² <u>Pregnancy Risk Assessment Monitoring System (PRAMS) Surveillance Report: 1993-1994</u>. Maternal and Child Health Assessment Section, Community and Family Health, Washington State Department of Health, 1996.

³ Colley Gilbert B, Johnson CH, Morrow B, Ahluwalia IB, Gaffield ME, Fischer L, Rogers M, Whitehead N. <u>PRAMS 1997 Surveillance Report</u>. Atlanta, G: Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease and Prevention, 1999.

Table 1.1: Demographic Characteristics of Washington State Resident Birth Mothers

Maternal			WA PRAMS	WA PRAMS
Characteristics ^a	State Total	% State Total	Total	%Total ^b
Total ^c	217,205	100.0	6,034	100.0
Maternal Age				
<20 years	23,838	11.0	1,021	13.7
20-24 years	51,667	23.8	1,557	23.2
25-34 years	112,137	51.6	2,876	52.7
35+ years	29,474	13.6	579	10.4
Race/Ethnicity ^d				
White	157,471	72.5	1,410	74.9
African American	7,925	3.7	969	3.8
Native American	4,600	2.1	1,252	2.2
Asian/Pacific Islander	13,959	6.4	1,208	6.7
Hispanic	26,267	12.1	1,195	12.4
Maternal Education ^e				
<12 years	35,302	18.1	1,323	17.9
12 years	61,869	31.7	1,717	32.1
>12 years	98,002	50.2	2,331	49.9
Marital Status				
Married	157,168	72.4	3,842	72.7
Unmarried	59,527	27.4	2,181	27.3
Medicaid Status				
Medicaid ^f	90,319	41.8	3,201	40.3
Cash Assistance ⁹	31,707	14.7	1,137	13.1
Pre-First Steps (FS) Medicaid Only ^h	23,875	16.1	1,266	16.5
First Steps Expansion	34,689	11.0	798	10.8
Non-Medicaid ^j	125,865	58.2	2,817	59.7
Baby's Birth Weight (grams)				
Low Birth Weight (<2500 g)	12,207	5.6	355	5.0
Normal Birth Weight (≥2500 g)	204,422	94.4	5,664	95.0
Site of Prenatal Care Visit				
Hospital Clinic	_K	_K	1,594	19.9
Health Department Clinic	_K	_K	523	5.7
Private Doctor's Office	_K	_K	2,731	60.3
Military Facility	_K	_K	240	3.5
Community or Migrant Health Center	_k	_k	252	2.9
Other Clinic	_k	_k	530	7.7

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State birth certificates;

Medicaid status from linkage with Washington State First Steps Database. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

^cRefers to surveillance period from April 1996 through December 1998.

^dHispanic Ethnicity was missing on 3.2% of the Washingtron State birth certificates.

^e10% or more of the maternal education data are missing from birth certificate data.

^fMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion

⁹Cash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

^hPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups.

Non-Medicaid - women not enrolled in Medicaid.

^kInformation not available from Washington State birth certificates.

SELECTED MATERNAL RISK FACTORS DISCUSSED BY PRENATAL HEALTH CARE PROVIDERS

WASHINGTON STATE PRAMS 1996-1998



Health Care Provider Advice During Pregnancy

Providing health information and advice is a major component of prenatal care and an effective intervention to reduce risk and promote healthy outcomes for mothers and their babies. Pregnant women, when asked, view their medical provider as the best source of information and do follow their advice.¹

An expert panel on the Content of Prenatal Care noted good evidence of the efficacy of preconception advice about nutrition, smoking cessation, and maternal seat belt use.² The panel emphasized the importance of health promotion activities throughout the preconception and prenatal period.

Research demonstrates the impact of the medical care provider's advice on the behavior of the pregnant woman ranging from decisions to have certain tests, to use of seat belts and abstinence from substances. Many pregnant women will reduce their use of drugs and /or alcohol following the supportive advice from a health care professional, even if they never disclose their use.³ Research demonstrates that for light to moderate smokers, a brief intervention that includes an educational message by a trained provider effectively increases the cessation rate.⁴ Other research efforts have shown that provider advice related to appropriate weight gain positively affects actual weight gain during pregnancy.⁵ Another study in 1997 found that women who did not receive health advice during pregnancy were 1.5 times more likely to deliver a very low birth weight infant.⁶

In Washington State, PRAMS data on provider advice is used to evaluate efforts to promote screening for domestic violence, alcohol, drug and tobacco use and HIV testing. These efforts focus on training health care providers to improve skills to successfully identify, counsel, and refer women for treatment and or services. Other DOH activities are focused on prevention of low birth weight through improved nutritional intake and adequate weight gain during pregnancy.

¹ Minor M and Van Dort B. "Prevention research on the teratogenic effects of alcohol". Preventive Medicine 1982; 11: 346-359

² Public Health Service Expert Panel on Content of Prenatal Care. "Caring for our Future: The Content of Prenatal Care". DHHS, UPHS, Washington, DC 1989.

³ Morse B., Gehshan S., and Hutchins E. "Screening for Substance Abuse During Pregnancy: Improving Care, Improving Health". Arlington, VA: National Center for Education in Maternal and Child Health 1997.

⁴ Wakefield M, editor. Smoking and pregnancy: research findings from the Smoke Free Families Program. Tobacco Control 2000; suppl III 9: 12-94.

⁵ Cogswell, M., et al. "Medically Advised, Mother's Personal Target and Actual Weight Gain During Pregnancy," Obstetrics and Gynecology. 1999; 94 (4): 616-22.

⁶ Sable, MR, and Herman, AA. "The relationship between prenatal health behavior advice and low birth weight." Public Health Reports, 1997, 112 (4): 332-9

Survey Question #16:

During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? For each thing, please circle Y (Yes) if someone talked with you about it or N (No) if no one talked with you about it.

a. What you should eat during your pregnancy

No (12.4%)

Yes (87.6%)

Summary of Results:

Nutritional Intake during Pregnancy (Table 2.1 & Figure 2.1)

marital status, and Medicaid status.

Nearly eighty-eight percent (87.6%) of women said a prenatal health care provider talked with them about what foods should be eaten during pregnancy.
Hispanic women (92.0%) were significantly more likely to report a prenatal care provider discussed what foods should be eaten during pregnancy compared to White women (86.6%).
The data show that women who received prenatal care services at a health department clinic were significantly more likely to report a prenatal health care provider discussed what foods should be eaten during pregnancy (92.5%) compared to those who went to a private doctor's office (85.8%).
Women who reported a prenatal health care provider discussed what foods should be eaten during pregnancy were similar across maternal age, race/ethnicity, maternal education,

Table 2.1: Women who reported a prenatal health care provider discussed what foods should be eaten during pregnancy

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,877)	(n= 5,259)	(%= 87.6)	(86.2-89.0)
Maternal Age				
<20 years	990	923	90.0	(86.5-93.5)
20-24 years	1,521	1,371	86.6	(83.7-89.5)
25-34 years	2,803	2,474	87.9	(86.1-89.7)
35+ years	562	490	85.6	(81.1-90.1)
Race/Ethnicity				
White	1,397	1,210	86.6	(84.8-88.4)
African American	947	864	91.3	(89.5-93.1)
Native American	1,217	1,091	89.3	(87.7-90.9)
Asian/Pacific Islander	1,152	1,024	89.0	(87.2-90.8)
Hispanic	1,164	1,070	92.0	(90.4-93.6)
Maternal Education ^c				
<12 years	1,273	1,167	88.4	(85.1-91.7)
12 years	1,671	1,498	87.2	(84.7-89.7)
>12 years	2,305	2,034	87.2	(85.0-89.4)
Marital Status				
Married	3,767	3,336	86.8	(85.2-88.4)
Unmarried	2,101	1,915	89.8	(87.4-92.2)
Medicaid Status				
Medicaid ^d	3,092	2,826	89.0	(87.0-91.0)
Cash Assistance ^e	1,096	993	87.2	(83.3-91.1)
Pre-First Steps (FS) Medicaid Only ^f	1,221	1,117	89.4	(86.3-92.5)
First Steps Expansion ^g	775	716	90.6	(86.9-94.3)
Non-Medicaid ^h	2,770	2,420	86.8	(85.0-88.6)
Baby's Birth Weight (grams)				
Low Birth Weight (<2500 g)	334	302	90.1	(84.6-95.6)
Normal Birth Weight (≥2500 g)	5,529	4,943	87.5	(86.1-88.9)
Site of Prenatal Care Visit				
Hospital Clinic	1,581	1,443	90.3	(87.8-92.8)
Health Department Clinic	515	475	92.5	(88.8-96.2)
Private Doctor's Office	2,711	2,360	85.8	(83.8-87.8)
Military Facility	239	222	89.4	(82.3-96.5)
Community or Migrant Health Center	250	224	85.0	(76.8-93.2)
Other Clinic	522	488	92.4	(88.3-96.5)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State birth certificates; Medicaid status from linkage with Washington State First Steps Database; Prenatal care sites from PRAMS. Missing responses =157. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

^c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

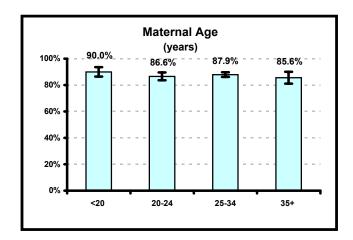
 $^{^{\}mathrm{e}}$ Cash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

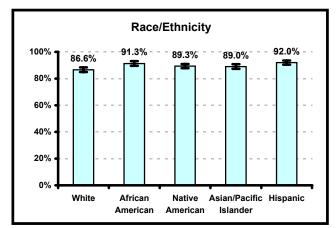
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

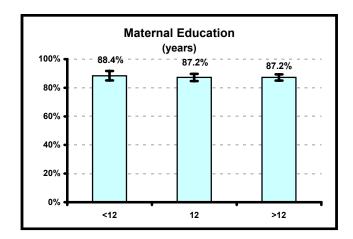
⁹First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups, poverty level,

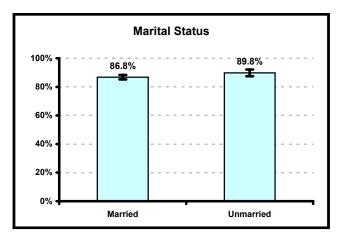
^hNon-Medicaid - women not enrolled in Medicaid.

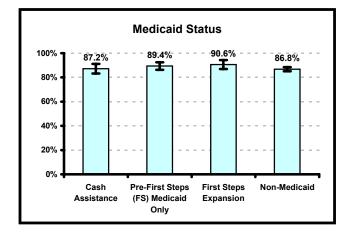
Figure 2.1: Women who reported a prenatal health care provider discussed what foods should be eaten during pregnancy











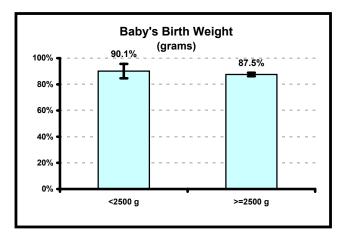
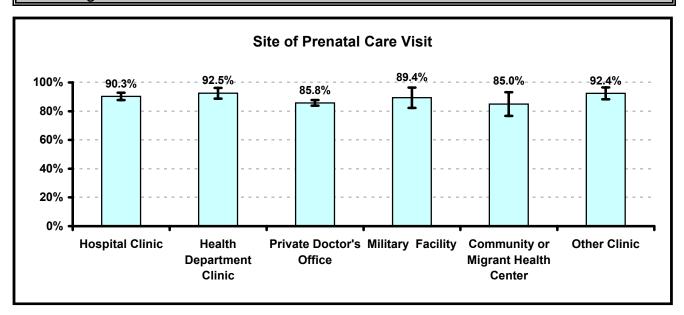


Figure 2.1 (cont'd): Women who reported a prenatal health care provider discussed what foods should be eaten during pregnancy
Washington State PRAMS 1996-1998



Survey Question #16:

During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? For each thing, please circle Y (Yes) if someone talked with you about it or N (No) if no one talked with you about it.

b. How smoking during pregnancy could affect your baby.

No (19.3%)

Yes (80.7%)

Summary of Results:

Fetal Effects of Smoking (Table 2.2 & Figure 2.2)

- □ Nearly eighty-one percent (80.7%) of women said a prenatal health care provider talked with them about how smoking during pregnancy could affect their baby. These women were more likely to be:
 - Teenagers
 - Women with less than 12 years of education
 - Unmarried
 - Medicaid recipients (specifically Pre-First Steps Medicaid Only)
 - Women with infants weighing less than 2500 grams at birth
- ☐ Hispanic women (90.9%) were significantly more likely to report a prenatal health care provider discussed with them about how smoking during pregnancy could affect their baby compared to White women (78.4%), Asian/Pacific Islander women (80.9%), and Native American women (87.5%).
- □ Women who received prenatal care services at a health department clinic were significantly more likely to report a prenatal health care provider discussed the fetal effects of smoking during pregnancy (88.2%) compared to those who went to a private doctor's office (76.9%).

Table 2.2: Women who reported a prenatal health care provider discussed how smoking during pregnancy could affect the baby

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,877)	(n= 4,959)	(%= 80.7)	(79.1-82.3)
Maternal Age				
<20 years	989	927	92.4	(89.5-95.3)
20-24 years	1,521	1,337	84.5	(81.4-87.6)
25-34 years	2,806	2,263	77.4	(75.0-79.8)
35+ years	560	431	73.2	(67.5-78.9)
Race/Ethnicity				
White	1,394	1,091	78.4	(76.2-80.6)
African American	946	827	87.7	(85.7-89.7)
Native American	1,215	1,055	87.5	(85.9-89.1)
Asian/Pacific Islander	1,155	927	80.9	(78.7-83.1)
Hispanic	1,167	1,059	90.9	(89.3-92.5)
Maternal Education ^c				
<12 years	1,275	1,179	90.2	(87.1-93.3)
12 years	1,670	1,454	81.9	(79.0-84.8)
>12 years	2,303	1,805	76.4	(73.9-78.9)
Marital Status				
Married	3,766	3,057	77.7	(75.7-79.7)
Unmarried	2,102	1,895	88.7	(86.2-91.2)
Medicaid Status				
Medicaid ^d	3,093	2,768	85.9	(83.5-88.3)
Cash Assistance ^e	1,096	990	87.8	(84.1-91.5)
Pre-First Steps (FS) Medicaid Onlyf	1,223	1,109	88.0	(84.7-91.3)
First Steps Expansion ^g	774	669	80.1	(75.2-85.0)
Non-Medicaid ^h	2,768	2,178	77.2	(74.8-79.6)
Baby's Birth Weight (grams)				
Low Birth Weight (<2500 g)	335	297	89.7	(84.4-95.0)
Normal Birth Weight (≥2500 g)	5,529	4,650	80.2	(78.4-82.0)
Site of Prenatal Care Visit				
Hospital Clinic	1,582	1,394	86.3	(83.4-89.2)
Health Department Clinic	515	471	88.2	(83.1-93.3)
Private Doctor's Office	2,710	2,143	76.9	(74.5-79.3)
Military Facility	239	216	87.8	(80.4-95.2)
Community or Migrant Health Center	251	220	84.2	(76.6-91.8)
Other Clinic	521	465	85.2	(79.9-90.5)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS.

Missing responses =157. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

^c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

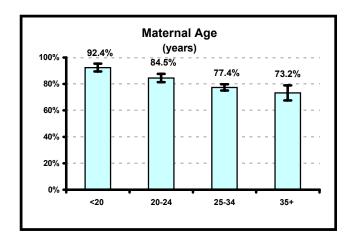
 $^{^{\}mathrm{e}}$ Cash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

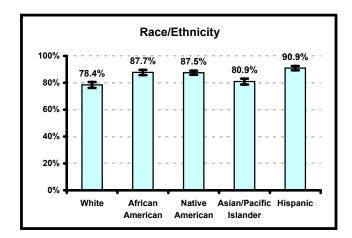
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

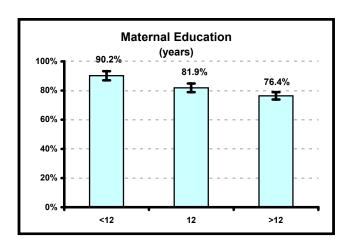
⁹First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups, poverty level,

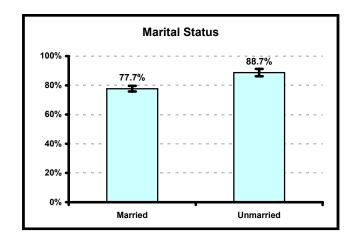
^hNon-Medicaid - women not enrolled in Medicaid.

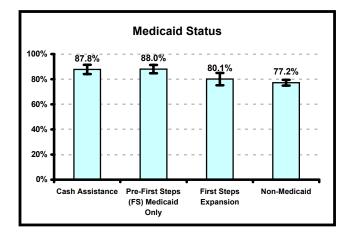
Figure 2.2: Women who reported a prenatal health care provider discussed how smoking during pregnancy could affect the baby











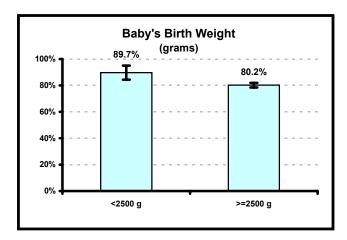
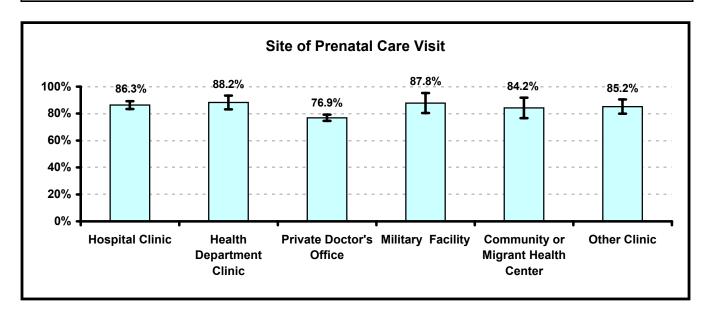


Figure 2.2 (cont'd): Women who reported a prenatal health care provider discussed how smoking during pregnancy could affect the baby Washington State PRAMS 1996-1998



Survey Question #16:

During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? For each thing, please circle Y (Yes) if someone talked with you about it or N (No) if no one talked with you about it.

c. Breast-feeding your baby.

No (13.1%)

Yes (86.9%)

Summary of Results:

Breast-feeding (Table 2.3 & Figure 2.3)

- ☐ Almost 87 percent (86.9%) of women said a prenatal health care provider talked with them about breast-feeding their baby. These women were more likely to be:
 - Women with less than a high school education
 - Medicaid recipients (specifically Pre-First Steps Medicaid Only)
- ☐ Teenagers (91.9%) were significantly more likely to report a prenatal health care provider discussed breast-feeding their baby compared to women 35 years or older (81.7%) and women aged 25 to 34 (85.6%).
- ☐ Hispanic women (93.9%) were significantly more likely to report a prenatal health care provider discussed breast-feeding their baby compared to White women (85.6%), Asian/Pacific Islander (85.8%), and African American women (90.8%).
- Among the women who received prenatal care services at a clinic listed as "other clinic", 92.0% of them said a prenatal health care provider discussed breast-feeding their baby. This proportion was significantly higher than those who received prenatal care services at a private doctor's office (84.3%).
- ☐ Marital status and the infant's birth weight status were not associated with women's report that a prenatal health care provider discussed breast-feeding.

Table 2.3: Women who reported that a prenatal health care provider discussed breast-feeding

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,883)	(n= 5,231)	(%= 86.9)	(85.5-88.3)
Maternal Age				
<20 years	990	934	91.9	(88.6-95.2)
20-24 years	1,524	1,384	89.3	(86.8-91.8)
25-34 years	2,808	2,442	85.6	(83.6-87.6)
35+ years	560	470	81.7	(76.8-86.6)
Race/Ethnicity				
White	1,395	1,195	85.6	(83.8-87.4)
African American	947	857	90.8	(89.0-92.6)
Native American	1,217	1,096	89.9	(88.3-91.5)
Asian/Pacific Islander	1,154	986	85.8	(83.8-87.8)
Hispanic	1,170	1,097	93.9	(92.5-95.3)
Maternal Education ^c				
<12 years	1,276	1,201	93.3	(90.8-95.8)
12 years	1,671	1,497	87.5	(85.0-90.0)
>12 years	2,305	1,978	84.8	(82.6-87.0)
Marital Status				
Married	3,770	3,296	86.1	(84.3-87.9)
Unmarried	2,104	1,928	89.3	(86.8-91.8)
Medicaid Status				
Medicaid ^d	3,097	2,868	90.1	(88.1-92.1)
Cash Assistance ^e	1,096	1,007	89.8	(86.3-93.3)
Pre-First Steps (FS) Medicaid Onlyf	1,228	1,140	91.0	(88.1-93.9)
First Steps Expansion ⁹	773	721	89.3	(85.4-93.2)
Non-Medicaid ^h	2,771	2,355	85.2	(83.2-87.2)
Baby's Birth Weight (grams)				,
Low Birth Weight (<2500 g)	333	294	86.1	(79.2-93.0)
Normal Birth Weight (≥2500 g)	5,536	4,923	87.0	(85.6-88.4)
Site of Prenatal Care Visit				
Hospital Clinic	1,586	1,450	90.2	(87.7-92.7)
Health Department Clinic	517	484	91.7	(87.2-96.2)
Private Doctor's Office	2,711	2,308	84.3	(82.3-86.3)
Military Facility	239	220	91.5	(85.4-97.6)
Community or Migrant Health Center	251	234	91.0	(84.1-97.9)
Other Clinic	521	484	92.0	(87.9-96.1)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS. Missing responses =151. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

^c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

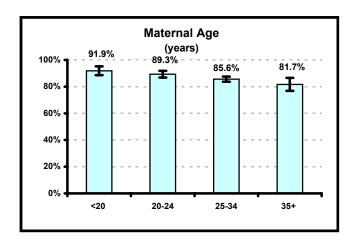
 $^{^{\}mathrm{e}}$ Cash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

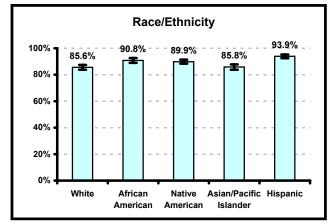
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

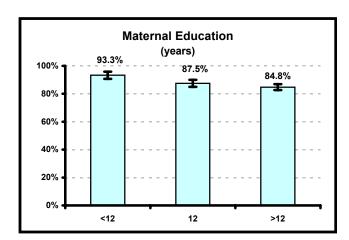
⁹First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups, poverty level,

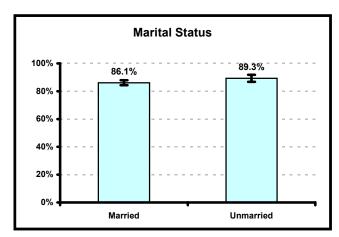
^hNon-Medicaid - women not enrolled in Medicaid.

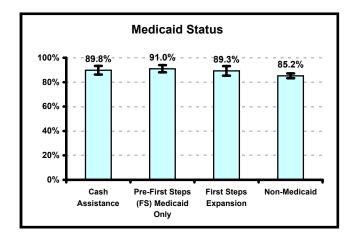
Figure 2.3: Women who reported a prenatal health care provider discussed breast-feeding











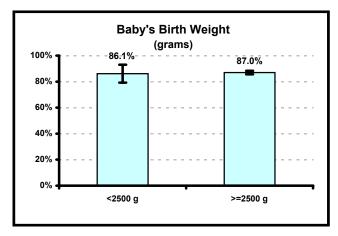
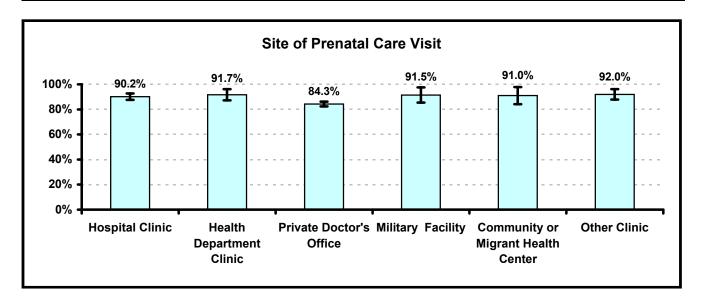


Figure 2.3 (cont'd): Women who reported a prenatal health care provider discussed breast-feeding



Survey Question #16:

During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? For each thing, please circle Y (Yes) if someone talked with you about it or N (No) if no one talked with you about it.

d. How drinking alcohol during pregnancy could affect your baby.

No (18.2%)

Yes (81.8%)

Summary of Results:

Fetal Effects of Alcohol Use (Table 2.4 & Figure 2.4)

- ☐ Approximately 81.8 percent of women said a prenatal health care provider discussed how drinking alcohol during pregnancy could affect their baby. These women were more likely to be:
 - Teenagers
 - > Hispanic
 - Women with less than 12 years of education
 - Unmarried
 - Medicaid recipients (specifically Cash Assistance and Pre-First Steps Medicaid Only)
 - Women who had infants weighing less than 2500 grams at birth.
- PRAMS data shows that of women who went to a health department clinic for prenatal care services, 88 percent of them said a prenatal health care provider discussed the fetal effects of drinking alcohol during pregnancy. This proportion was significantly higher than those who received prenatal care services at a private doctor's office (78.4%).

Table 2.4: Women who reported a prenatal health care provider discussed how drinking alcohol during pregnancy could affect the baby

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,871)	(n= 4,948)	(%= 81.8)	(80.2-83.4)
Maternal Age				
<20 years	992	924	91.8	(88.9-94.7)
20-24 years	1,524	1,325	83.6	(80.5-86.7)
25-34 years	2,797	2,264	79.3	(76.9-81.7)
35+ years	557	434	77.0	(71.7-82.3)
Race/Ethnicity				
White	1,394	1,111	80.0	(77.8-82.2)
African American	946	811	85.9	(83.7-88.1)
Native American	1,213	1,043	86.5	(84.7-88.3)
Asian/Pacific Islander	1,152	921	80.6	(78.4-82.8)
Hispanic	1,166	1,062	91.2	(89.6-92.8)
Maternal Education ^c				
<12 years	1,278	1,172	90.8	(87.9-93.7)
12 years	1,668	1,429	80.7	(77.6-83.8)
>12 years	2,297	1,816	78.7	(76.2-81.2)
Marital Status				
Married	3,758	3,047	78.9	(76.9-80.9)
Unmarried	2,104	1,894	89.3	(86.9-91.7)
Medicaid Status				
Medicaid ^d	3,097	2,740	85.4	(83.0-87.8)
Cash Assistance ^e	1,098	973	87.3	(83.6-91.0)
Pre-First Steps (FS) Medicaid Onlyf	1,225	1,099	87.3	(84.0-90.6)
First Steps Expansion ⁹	774	668	80.0	(74.9-85.1)
Non-Medicaid ^h	2,759	2,198	79.4	(77.2-81.6)
Baby's Birth Weight (grams)				
Low Birth Weight (<2500 g)	334	292	89.4	(84.1-94.7)
Normal Birth Weight (≥2500 g)	5,523	4,643	81.3	(79.7-82.9)
Site of Prenatal Care Visit				
Hospital Clinic	1,579	1,384	87.2	(84.5-89.9)
Health Department Clinic	516	466	88.0	(83.1-92.9)
Private Doctor's Office	2,707	2,155	78.4	(76.0-80.8)
Military Facility	239	212	87.6	(80.5-94.7)
Community or Migrant Health Center	252	222	87.2	(80.1-94.3)
Other Clinic	519	460	84.4	(78.9-89.9)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS. Missing responses =163. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

^c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

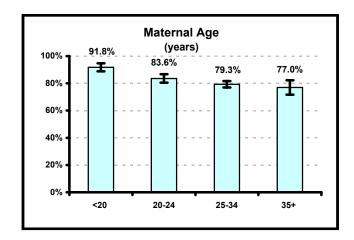
 $^{^{\}mathrm{e}}$ Cash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

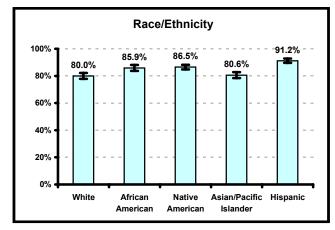
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

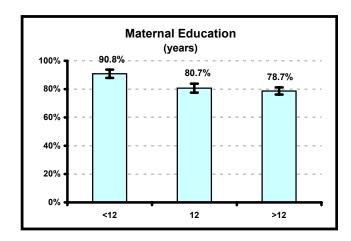
⁹First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups, poverty level,

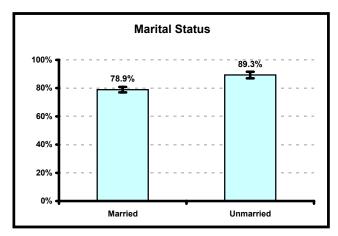
^hNon-Medicaid - women not enrolled in Medicaid.

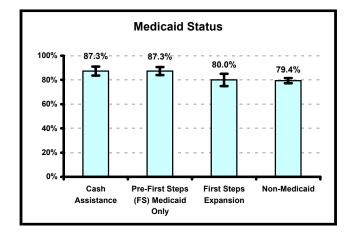
Figure 2.4: Women who reported a prenatal health care provider discussed discussed how drinking alcohol during pregnancy could affect the baby Washington State PRAMS 1996-1998











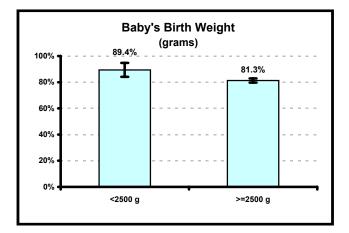
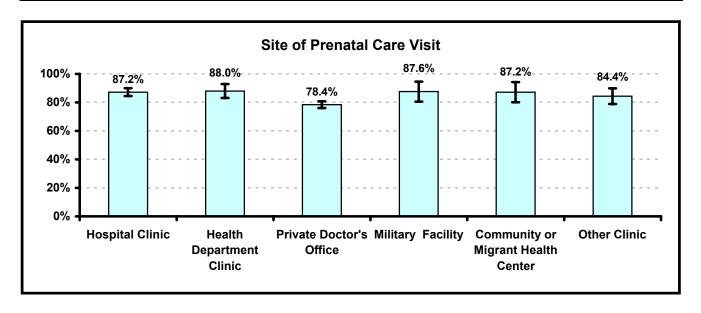


Figure 2.4 (cont'd): Women who reported a prenatal health care provider discussed how drinking alcohol during pregnancy could affect the baby Washington State PRAMS 1996-1998



Survey Question #16:

During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? For each thing, please circle Y (Yes) if someone talked with you about it or N (No) if no one talked with you about it.

e. Using a seat belt during your pregnancy.

No (39.3%)

Yes (60.7%)

Summary of Results:

Seat Belt Use during Pregnancy (Table 2.5 & Figure 2.5)

- Over half (60.7%) of the PRAMS respondents said a prenatal health care provider talked with them about using a seat belt during their pregnancy. These women were more likely to be:
 - Hispanic
 - Medicaid recipients (specifically Pre-First Steps Medicaid Only)
- □ Women who had less than a high school education (68.4%) were significantly more likely to report a prenatal health care provider discussed with them about using a seat belt during their pregnancy compared to those who had more than a high school education (56.6%).
- Approximately 70.4 percent of women said a prenatal health care provider talked with them about using a seat belt during their pregnancy at the health department clinic where they received their prenatal care services. This proportion was significantly higher than what was reported by women who received prenatal care services at a private doctor's office (55.9%).
- ☐ The following indicators were not associated with women's report that a prenatal health care provider discussion of seat belt use during their pregnancy: maternal age, marital status, and the infant's birth weight status.

Table 2.5: Women who reported a prenatal health care provider discussed seatbelt use during pregnancy

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,872)	(n= 3,835)	(%= 60.7)	(58.7-62.7)
Maternal Age				
<20 years	985	685	64.0	(58.5-69.5)
20-24 years	1,521	1,050	64.4	(60.3-68.5)
25-34 years	2,807	1,773	59.3	(56.6-62.0)
35+ years	558	327	55.6	(49.3-61.9)
Race/Ethnicity				
White	1,397	803	57.2	(54.7-59.7)
African American	941	630	66.7	(63.8-69.6)
Native American	1,216	755	62.2	(59.8-64.6)
Asian/Pacific Islander	1,154	749	65.5	(62.8-68.2)
Hispanic	1,164	898	77.4	(75.0-79.8)
Maternal Education ^c				
<12 years	1,275	936	68.4	(63.7-73.1)
12 years	1,667	1,104	62.5	(58.8-66.2)
>12 years	2,301	1,378	56.6	(53.5-59.7)
Marital Status				
Married	3,766	2,434	60.3	(57.9-62.7)
Unmarried	2,097	1,396	61.8	(58.1-65.5)
Medicaid Status				
Medicaid ^d	3,089	2,151	65.7	(62.8-68.6)
Cash Assistance ^e	1,096	714	61.7	(56.2-67.2)
Pre-First Steps (FS) Medicaid Only ^f	1,220	885	69.8	(65.3-74.3)
First Steps Expansion ⁹	773	552	64.3	(58.6-70.0)
Non-Medicaid ^h	2,767	1,679	57.5	(54.8-60.2)
Baby's Birth Weight (grams)		•		,
Low Birth Weight (<2500 g)	333	217	64.1	(55.1-73.1)
Normal Birth Weight (≥2500 g)	5,525	3,606	60.5	(58.5-62.5)
Site of Prenatal Care Visit				
Hospital Clinic	1,578	1,126	68.8	(64.9-72.7)
Health Department Clinic	513	375	70.4	(63.7-77.1)
Private Doctor's Office	2,712	1,604	55.9	(53.2-58.6)
Military Facility	239	160	64.6	(54.2-75.0)
Community or Migrant Health Center	252	181	72.1	(62.5-81.7)
Other Clinic	520	353	63.0	(55.9-70.1)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS.

Missing responses =162. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).
^c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

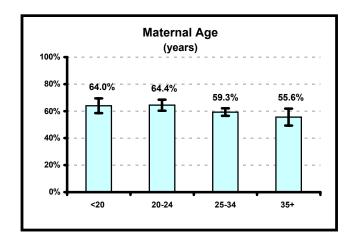
^eCash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

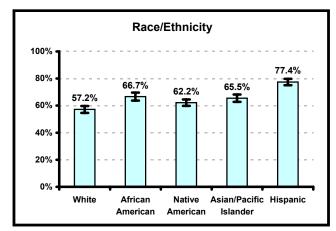
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

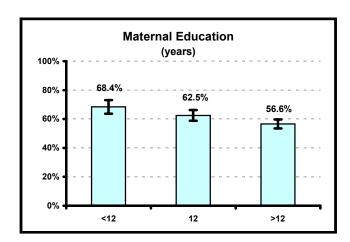
⁹First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups, poverty level,

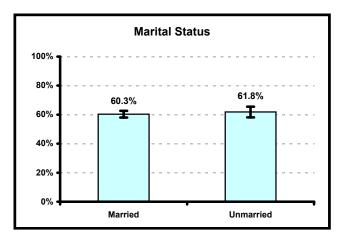
^hNon-Medicaid - women not enrolled in Medicaid.

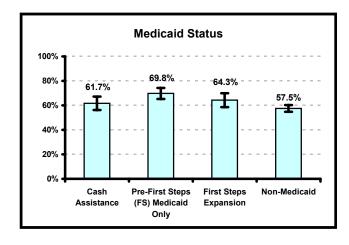
Figure 2.5: Women who reported a prenatal health care provider discussed seatbelt use during pregnancy











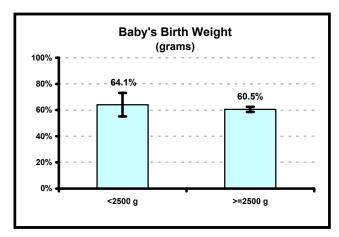
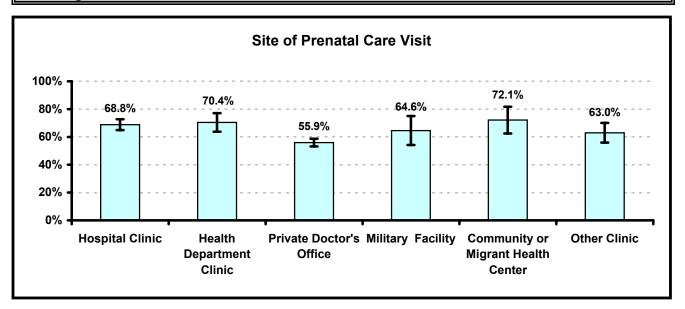


Figure 2.5 (cont'd): Women who reported a prenatal health care provider discussed seatbelt use during pregnancy



During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? For each thing, please circle Y (Yes) if someone talked with you about it or N (No) if no one talked with you about it.

f. Birth control methods to use after your pregnancy.

No (15.0%)

Yes (85.0%)

Summary of Results:

Postpartum Birth Control Methods (Table 2.6 & Figure 2.6)

- ☐ Eighty-five percent of women said a prenatal health care provider discussed postpartum birth control methods with them. These women were more likely to be:
 - ➤ Women with less than 12 years of education
 - ➤ Medicaid recipients (specifically Pre-First Steps Medicaid Only)
- ☐ Hispanic women (90.7%) were significantly more likely to report a prenatal health care provider discussed postpartum birth control methods with them compared to Asian/Pacific Islander women (82.1%) and White women (84.1%).
- □ Women who received prenatal care services at a community or migrant health center were significantly more likely to report a prenatal health care provider talked with them about using birth control methods after pregnancy (93.7%) compared to those who went to a private doctor's office for prenatal care services (82.7%).
- ☐ The following indicators were not associated with women's report that a prenatal health care provider discussed postpartum birth control methods: maternal age, marital status, and the infant's birth weight status.

Table 2.6: Women who reported a prenatal health care provider discussed birth control methods to use after pregnancy

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,872)	(n= 5,073)	(%= 85.0)	(83.6-86.4)
Maternal Age				
<20 years	988	912	90.3	(87.0-93.6)
20-24 years	1,517	1,344	87.5	(84.8-90.2)
25-34 years	2,804	2,352	82.9	(80.7-85.1)
35+ years	562	464	83.1	(78.4-87.8)
Race/Ethnicity				
White	1,396	1,173	84.1	(82.1-86.1)
African American	946	831	88.2	(86.2-90.2)
Native American	1,217	1,076	88.8	(87.2-90.4)
Asian/Pacific Islander	1,153	943	82.1	(79.9-84.3)
Hispanic	1,160	1,050	90.7	(89.1-92.3)
Maternal Education ^c				
<12 years	1,271	1,176	91.8	(89.1-94.5)
12 years	1,673	1,451	84.9	(82.2-87.6)
>12 years	2,301	1,912	82.8	(80.4-85.2)
Marital Status				
Married	3,764	3,187	83.7	(81.9-85.5)
Unmarried	2,099	1,880	88.7	(86.2-91.2)
Medicaid Status				
Medicaid ^d	3,088	2,786	89.7	(87.7-91.7)
Cash Assistance ^e	1,096	975	90.3	(87.2-93.4)
Pre-First Steps (FS) Medicaid Onlyf	1,220	1,113	91.9	(89.5-94.3)
First Steps Expansion ⁹	772	698	85.5	(81.0-90.0)
Non-Medicaid ^h	2,768	2,274	82.0	(79.8-84.2)
Baby's Birth Weight (grams)				
Low Birth Weight (<2500 g)	333	272	81.9	(74.8-89.0)
Normal Birth Weight (≥2500 g)	5,525	4,787	85.2	(83.6-86.8)
Site of Prenatal Care Visit				
Hospital Clinic	1,581	1,394	86.8	(83.9-89.7)
Health Department Clinic	512	460	90.3	(86.2-94.4)
Private Doctor's Office	2,712	2,260	82.7	(80.5-84.9)
Military Facility	239	209	88.7	(82.0-95.4)
Community or Migrant Health Center	251	232	93.7	(88.4-99.0)
Other Clinic	519	469	89.5	(85.0-94.0)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State

birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS. Missing responses =162. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

^c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

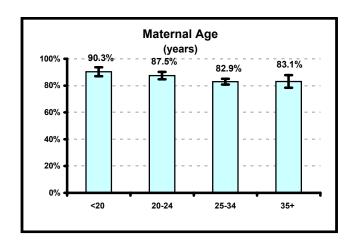
 $^{^{\}mathrm{e}}$ Cash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

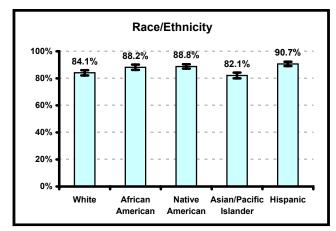
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

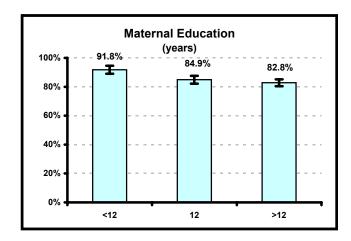
⁹First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups. poverty level,

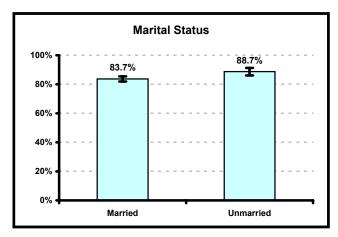
^hNon-Medicaid - women not enrolled in Medicaid.

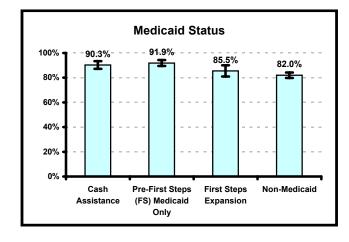
Table 2.6: Women who reported a prenatal health care provider discussed birth control methods to use after pregnancy











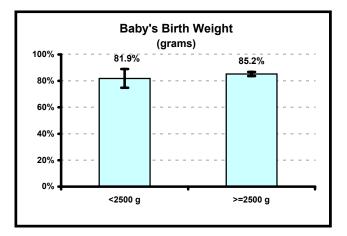
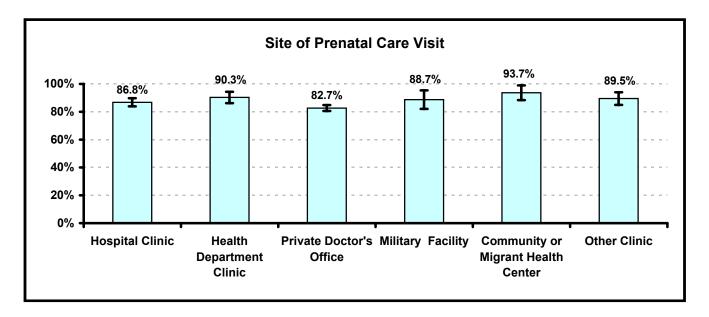


Table 2.6 (cont'd): Women who reported a prenatal health care provider discussed birth control methods to use after pregnancy



During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? For each thing, please circle Y (Yes) if someone talked with you about it or N (No) if no one talked with you about it.

g. The kinds of medicines that were safe to take during your pregnancy.

No (9.9%) Yes (90.1%)

Summary of Results:

Safe Medication Intake during Pregnancy (Table 2.7 & Figure 2.7)

- ☐ An estimated 90.1 percent of women reported a prenatal health care provider discussed with them the kinds of medicines that were safe to take during pregnancy. These women were more likely to be:
 - ➤ Non-Medicaid recipients
- □ Women 35 years or older (94.1%) were significantly more likely to report a prenatal health care provider talked with them about the kinds of medicines that were safe to take during pregnancy compared to teenagers (87.3%).
- ☐ Hispanic women (91.2%) were significantly more likely to report a prenatal health care provider talked with them about the intake of safe medication during pregnancy compared to Native American women (85.4%).
- ☐ The proportion of women who reported a prenatal health care provider discussed the kinds of safe medications to take during pregnancy did not significantly differ by maternal education, marital status, the infant's birth weight status, or the site of prenatal care visit.

Table 2.7: Women who reported a prenatal care provider discussed the kinds of medicines that were safe to take during pregnancy

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,874)	(n= 5,253)	(%= 90.1)	(88.9-91.3)
Maternal Age				
<20 years	990	867	87.3	(83.6-91.0)
20-24 years	1,520	1,352	89.6	(87.1-92.1)
25-34 years	2,801	2,517	90.2	(88.4-92.0)
35+ years	562	516	94.1	(91.4-96.8)
Race/Ethnicity				
White	1,395	1,258	90.0	(88.4-91.6)
African American	946	861	90.7	(88.9-92.5)
Native American	1,219	1,041	85.4	(83.6-87.2)
Asian/Pacific Islander	1,148	1,028	89.8	(88.0-91.6)
Hispanic	1,166	1,065	91.2	(89.6-92.8)
Maternal Education ^c				
<12 years	1,273	1,129	87.7	(84.4-91.0)
12 years	1,668	1,487	89.2	(86.8-91.6)
>12 years	2,306	2,069	91.6	(89.8-93.4)
Marital Status				
Married	3,763	3,407	90.8	(89.4-92.2)
Unmarried	2,102	1,838	88.2	(85.7-90.7)
Medicaid Status				
Medicaid ^d	3,091	2,716	87.6	(85.4-89.8)
Cash Assistance ^e	1,098	952	86.7	(82.8-90.6)
Pre-First Steps (FS) Medicaid Onlyf	1,222	1,078	88.4	(85.5-91.3)
First Steps Expansion ⁹	771	686	87.4	(83.3-91.5)
Non-Medicaid ^h	2,768	2,524	91.7	(90.1-93.3)
Baby's Birth Weight (grams)				
Low Birth Weight (<2500 g)	335	294	91.0	(86.1-95.9)
Normal Birth Weight (≥2500 g)	5,525	4,946	90.0	(88.8-91.2)
Site of Prenatal Care Visit				
Hospital Clinic	1,578	1,411	90.1	(87.6-92.6)
Health Department Clinic	517	464	89.3	(84.6-94.0)
Private Doctor's Office	2,713	2,429	90.1	(88.5-91.7)
Military Facility	239	219	92.9	(87.4-98.4)
Community or Migrant Health Center	251	221	80.5	(70.9-90.1)
Other Clinic	518	461	93.2	(89.7-96.7)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State

birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS. Missing responses =160. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

^c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

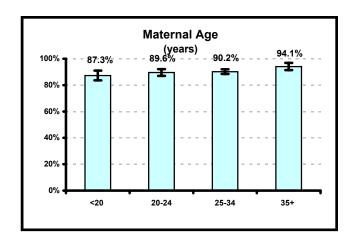
^eCash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

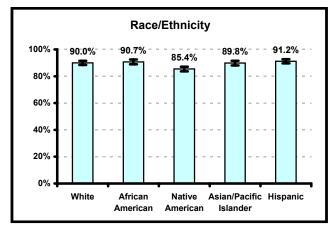
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

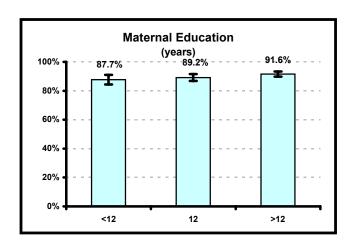
⁹First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups. poverty level,

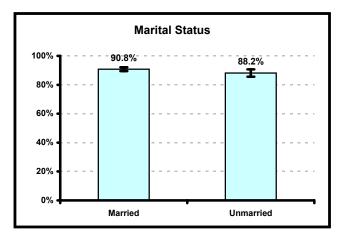
^hNon-Medicaid - women not enrolled in Medicaid.

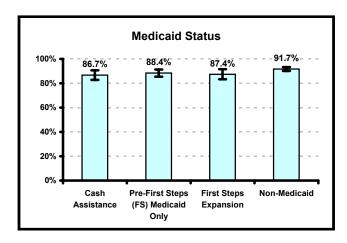
Figure 2.7: Women who reported a prenatal care provider discussed the kinds of medicines that were safe to take during pregnancy Washington State PRAMS 1996-1998











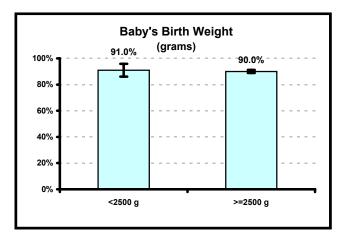
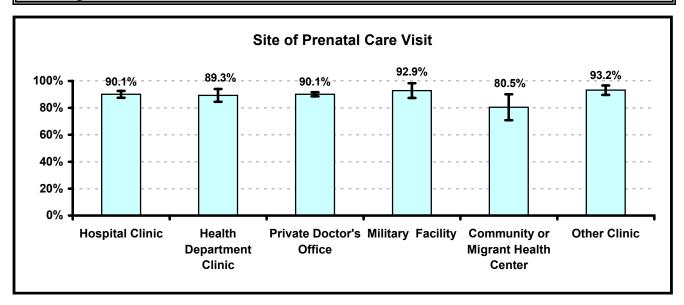


Figure 2.7(cont'd): Women who reported a prenatal care provider discussed the kinds of medicines that were safe to take during pregnancy Washington State PRAMS 1996-1998



During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? For each thing, please circle Y (Yes) if someone talked with you about it or N (No) if no one talked with you about it.

h. How using illegal drugs could affect your baby.

No (29.7%) Yes (71.3%)

Summary of Results:

Fetal Effects of Illegal Drugs Use (Table 2.8 and Figure 2.8)

- ☐ An estimated 71.3 percent of women reported a prenatal health care provider discussed how using illegal drugs could affect their baby. These women were more likely to be:
 - Teenagers
 - > Hispanic
 - Women with less than 12 years of education
 - Unmarried
 - Medicaid receipts (specifically Pre-First Steps Medicaid Only)
- Among the women who went to a military facility for prenatal care, 83.7 percent of them stated a prenatal health care provider discussed the fetal effects of using illegal drugs. This percentage was significantly higher than what was reported by women who received their prenatal care services at a private doctor's office (65.7%).
- ☐ There was no association between women's report that a prenatal health care provider discussed how using illegal drugs during pregnancy could affect their baby and the infant's birth weight status.

Table 2.8: Women who reported a prenatal health care provider discussed about how using illegal drugs during pregnancy could affect the baby

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,863)	(n= 4,485)	(%= 71.3)	(69.3-73.3)
Maternal Age				
<20 years	988	894	87.8	(84.1-91.5)
20-24 years	1,524	1,228	74.4	(70.7-78.1)
25-34 years	2,791	1,991	67.4	(64.7-70.1)
35+ years	559	371	62.5	(56.4-68.6)
Race/Ethnicity				
White	1,390	941	68.0	(65.6-70.4)
African American	946	770	81.8	(79.4-84.2)
Native American	1,216	963	80.2	(78.2-82.2)
Asian/Pacific Islander	1,147	796	70.5	(68.0-73.0)
Hispanic	1,164	1,015	87.5	(85.7-89.3)
Maternal Education ^c				
<12 years	1,275	1,119	84.2	(80.5-87.9)
12 years	1,666	1,326	72.5	(69.0-76.0)
>12 years	2,296	1,557	65.3	(62.4-68.2)
Marital Status				
Married	3,751	2,687	67.8	(65.4-70.2)
Unmarried	2,103	1,790	80.6	(77.5-83.7)
Medicaid Status				
Medicaid ^d	3,093	2,594	78.8	(76.3-81.3)
Cash Assistance ^e	1,097	905	78.9	(74.2-83.6)
Pre-First Steps (FS) Medicaid Only ^f	1,225	1,058	82.1	(78.2-86.0)
First Steps Expansion ⁹	771	631	73.7	(68.2-79.2)
Non-Medicaid ^h	2,755	1,879	66.2	(63.7-68.7)
Baby's Birth Weight (grams)				
Low Birth Weight (<2500 g)	333	272	78.7	(70.9-86.5)
Normal Birth Weight (<u>></u> 2500 g)	5,516	4,200	70.9	(68.9-72.9)
Site of Prenatal Care Visit				
Hospital Clinic	1,579	1,288	79.9	(76.4-83.4)
Health Department Clinic	515	439	82.2	(76.3-88.1)
Private Doctor's Office	2,701	1,871	65.7	(63.2-68.2)
Military Facility	239	203	83.7	(75.5-91.9)
Community or Migrant Health Center	252	206	78.3	(69.1-87.5)
Other Clinic	519	436	77.6	(71.3-83.9)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS. Missing responses =171. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

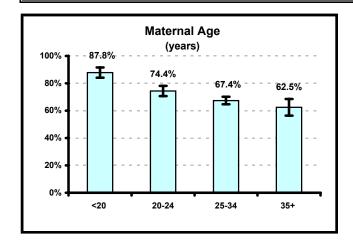
^eCash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

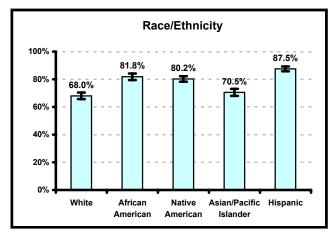
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

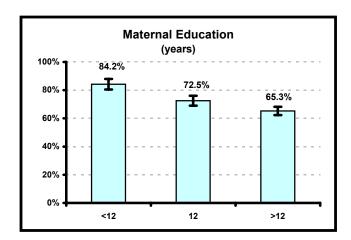
^gFirst Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups. poverty level,

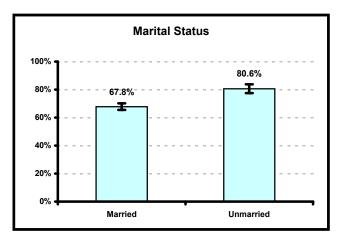
ⁿNon-Medicaid - women not enrolled in Medicaid.

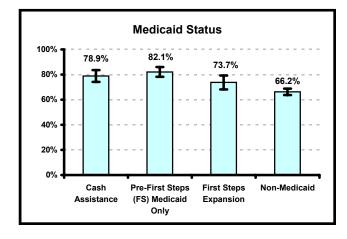
Figure 2.8: Women who reported a prenatal health care provider discussed how using illegal drugs during pregnancy could affect the baby Washington State PRAMS 1996-1998











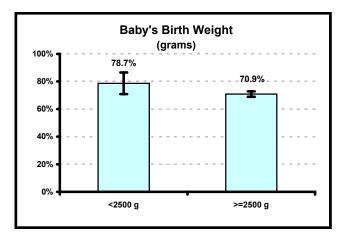


Figure 2.8 (cont'd): Women who reported a prenatal health care provider discussed how using illegal drugs during pregnancy could affect the baby Washington State PRAMS 1996-1998

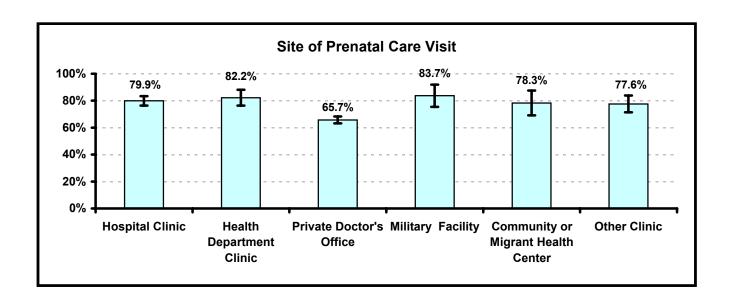


Table 2.9: Women who reported a prenatal health care provider discussed the growth and development of the baby during pregnancy Washington State PRAMS 1996-1998

% Yesb Maternal Respondents 95% CI **Characteristics**^a (n = 5,880)(n = 5,302)(% = 88.5)(87.1-89.9) **Maternal Age** 989 941 92.4 <20 years (89.3-95.5)20-24 years 1,522 1,382 89.3 (86.6-92.0)25-34 years 2,806 2,485 87.5 (85.5-89.5)35+ years 562 493 86.3 (82.0-90.6)Race/Ethnicity White 1,396 1,218 87.3 (85.5-89.1)African American 948 870 91.7 (89.9 - 93.5)Native American 89.8 (88.2 - 91.4)1,216 1.091 Asian/Pacific Islander 1,155 1,033 898 (88.2 - 91.4)Hispanic 1,165 1,090 93.6 (92.2-95.0)Maternal Education^c <12 years 1.274 1.203 92.8 (90.1-95.5)(86.0-91.0) 12 years 1.670 1.511 88.5 >12 years 2,307 2,030 86.7 (84.5-88.9)**Marital Status** Married 3,768 87.4 (85.8-89.0)3,360 Unmarried 2,103 1,933 91.3 (89.1-93.5)**Medicaid Status** Medicaid^d 2,849 90.7 3,094 (88.7 - 92.7)Cash Assistance^e 1,097 1,003 91.4 (88.3-94.5)Pre-First Steps (FS) Medicaid Onlyf (89.0-94.4)1.223 1,136 91.7 First Steps Expansion⁹ 774 710 88.6 (84.7-92.5) Non-Medicaidh 2,771 2,439 87.0 (85.2-88.8)Baby's Birth Weight (grams) Low Birth Weight (<2500 g) 334 300 88.6 (82.5-94.7)Normal Birth Weight (≥2500 g) 5,532 4,989 88.5 (87.1-89.9)Site of Prenatal Care Visit 1,458 Hospital Clinic 1,583 92.1 (89.7-94.5)Health Department Clinic 515 487 93.3 (89.2-97.4)Private Doctor's Office 2,712 2,368 86.4 (84.4-88.4)Military Facility 239 218 84.4 (76.2 - 92.6)93.3 Community or Migrant Health Center 252 231 (88.4 - 98.2)Other Clinic 521 491 (87.9 - 96.1)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS. Missing responses =154. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

^c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

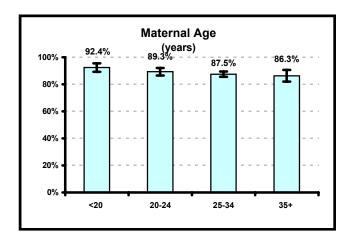
 $^{^{\}mathrm{e}}$ Cash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

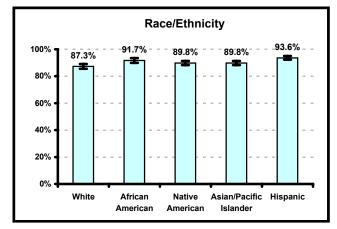
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

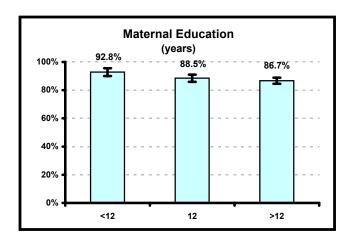
⁹First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups. poverty level,

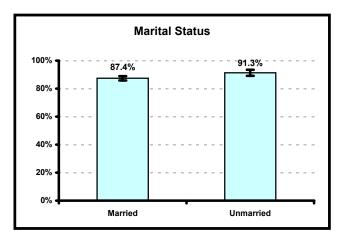
^hNon-Medicaid - women not enrolled in Medicaid.

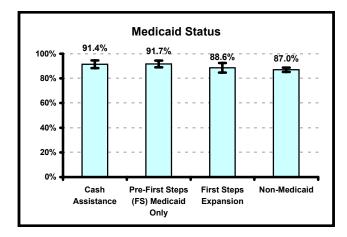
Figure 2.9: Women who reported a prenatal health care provider discussed the growth and development of the baby during pregnancy Washington State PRAMS 1996-1998











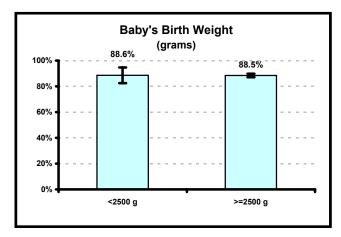
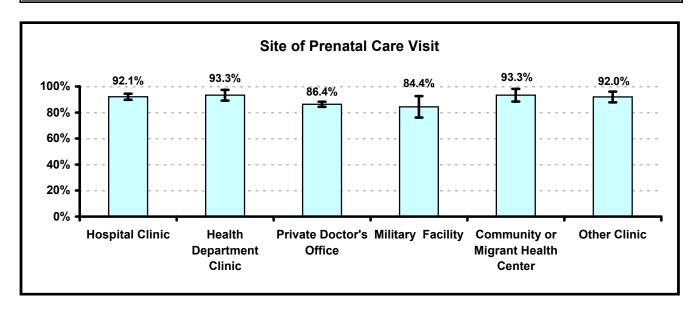


Figure 2.9 (cont'd): Women who reported a prenatal health care provider discussed the growth and development of the baby during pregnancy Washington State PRAMS 1996-1998



During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? For each thing, please circle Y (Yes) if someone talked with you about it or N (No) if no one talked with you about it.

j. What to do if your labor starts early.

No (11.8%)

Yes (88.2%)

Summary of Results:

Early Labor (Table 2.10 & Figure 2.10)

- Approximately 88.2 percent of women reported a prenatal health care provider discussed with them about what to do if labor starts early. These women were more likely to be:
 - Women with infants weighing less than 2500 grams at birth
- ☐ Hispanic women (89.6%) were significantly more likely to report a prenatal health care provider talked with them about what to do if early labor starts compared to Native American women (85.2%).
- ☐ Maternal age, maternal education, marital status, Medicaid status, and the site of prenatal care visit were not significantly associated with women's report that a prenatal health care provider discussed what to do if labor starts early.

Table 2.10: Women who reported a prenatal health care provider discussed what to do if labor starts early

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,877)	(n= 5,159)	(%= 88.2)	(86.8-89.6)
Maternal Age				
<20 years	990	857	87.3	(83.6-91.0)
20-24 years	1,520	1,351	89.2	(86.7-91.7)
25-34 years	2,804	2,454	87.7	(85.7-89.7)
35+ years	562	497	90.4	(86.9-93.9)
Race/Ethnicity				
White	1,398	1,237	88.2	(86.4-90.0)
African American	947	849	89.4	(87.4-91.4)
Native American	1,219	1,038	85.2	(83.4-87.0)
Asian/Pacific Islander	1,151	995	86.4	(84.4-88.4)
Hispanic	1,162	1,040	89.6	(87.8-91.4)
Maternal Education ^c				
<12 years	1,275	1,112	87.0	(83.7-90.3)
12 years	1,669	1,467	88.6	(86.2-91.0)
>12 years	2,307	2,047	89.2	(87.2-91.2)
Marital Status				
Married	3,771	3,344	88.7	(87.1-90.3)
Unmarried	2,097	1,808	86.8	(84.1-89.5)
Medicaid Status				
Medicaid ^d	3,088	2,711	88.3	(86.3-90.3)
Cash Assistance ^e	1,095	951	87.9	(84.2-91.6)
Pre-First Steps (FS) Medicaid Only ^f	1,221	1,074	87.7	(84.6-90.8)
First Steps Expansion ⁹	772	686	89.6	(86.1-93.1)
Non-Medicaid ^h	2,773	2,435	88.2	(86.4-90.0)
Baby's Birth Weight (grams)				
Low Birth Weight (<2500 g)	332	265	75.1	(66.9-83.3)
Normal Birth Weight (<u>></u> 2500 g)	5,531	4,880	88.9	(87.5-90.3)
Site of Prenatal Care Visit				
Hospital Clinic	1,580	1,391	89.3	(86.8-91.8)
Health Department Clinic	513	458	91.0	(87.1-94.9)
Private Doctor's Office	2,713	2,355	87.5	(85.7-89.3)
Military Facility	239	213	87.5	(80.2-94.8)
Community or Migrant Health Center	252	220	85.3	(77.1-93.5)
Other Clinic	522	477	90.7	(86.2-95.2)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State

birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS. Missing responses =157. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

^c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

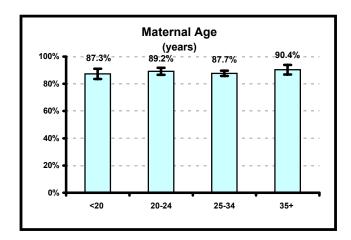
^eCash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

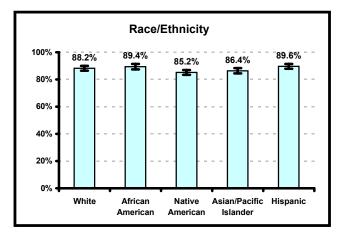
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

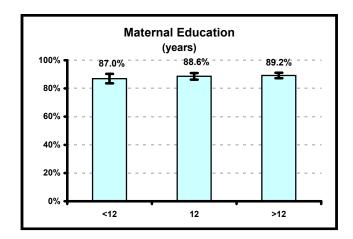
⁹First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups, poverty level,

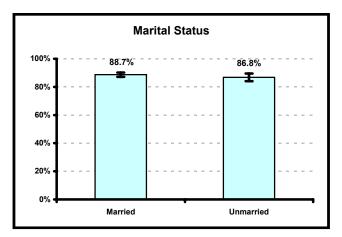
^hNon-Medicaid - women not enrolled in Medicaid.

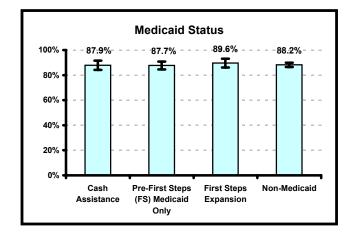
Figure 2.10: Women who reported a prenatal health care provider discussed what to do if labor starts early











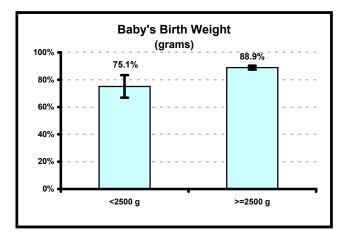
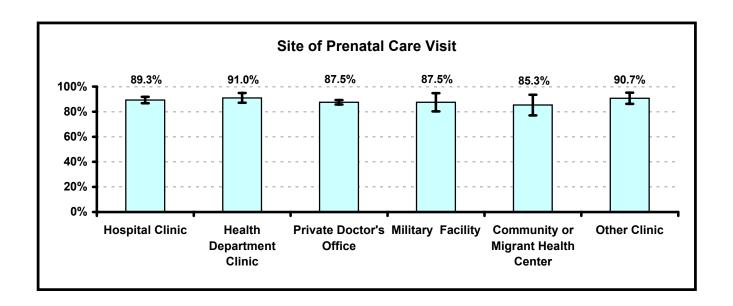


Figure 2.10 (cont'd): Women who reported a prenatal health care provider discussed what to do if labor starts early



During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? For each thing, please circle Y (Yes) if someone talked with you about it or N (No) if no one talked with you about it.

k. How to keep from getting HIV (the virus that causes AIDS).

```
No (51.4%)
Yes (48.6%)
```

Summary of Results:

HIV Prevention (Table 2.11 & Figure 2.11)

- ☐ Almost (48.6%) half of women reported a prenatal health care provider discussed with them about how to keep from getting HIV (the virus that causes AIDS). These women were more likely to be:
 - Teenagers
 - > Hispanic
 - Women with less than 12 years of education
 - Unmarried
 - Medicaid recipients (specifically Cash Assistance)
- □ Women who went to a health department clinic for prenatal care services (72.0%) were more likely to report a prenatal health care provider discussed how to prevent from getting the HIV virus compared to those who received prenatal care services at a private doctor's office (40.4%), a clinic listed as "other clinic" (51.3%), or hospital clinic (60.9%).
- ☐ Women who reported a prenatal health care provider discussed with them about how to keep from getting HIV did not significantly differ by the infant's birth weight status.

Table 2.11: Women who reported a prenatal health care provider how to keep from getting HIV (the virus that causes AIDS).

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,836)	(n= 3,386)	(%= 48.6)	(46.6-50.6)
Maternal Age				
<20 years	981	730	69.9	(64.8-75.0)
20-24 years	1,514	1,005	59.8	(55.7-63.9)
25-34 years	2,785	1,408	41.4	(38.7-44.1)
35+ years	555	243	32.5	(26.8-38.2)
Race/Ethnicity				
White	1,392	583	42.6	(40.1-45.1)
African American	938	600	64.2	(61.3-67.1)
Native American	1,211	753	63.7	(61.3-66.1)
Asian/Pacific Islander	1,140	580	52.5	(49.8-55.2)
Hispanic	1,155	870	75.8	(73.4-78.2)
Maternal Education ^c				
<12 years	1,265	976	72.3	(67.8-76.8)
12 years	1,658	1,034	52.1	(48.4-55.8)
>12 years	2,289	1,002	36.5	(33.6-39.4)
Marital Status				
Married	3,737	1,930	43.0	(40.6-45.4)
Unmarried	2,090	1,451	63.4	(59.7-67.1)
Medicaid Status				
Medicaid ^d	3,070	2,162	63.7	(60.8-66.6)
Cash Assistance ^e	1,090	774	66.4	(60.9-71.9)
Pre-First Steps (FS) Medicaid Onlyf	1,215	873	65.2	(60.7-69.7)
First Steps Expansion ^g	765	515	58.3	(52.6-64.0)
Non-Medicaid ^h	2,750	1,215	38.4	(35.9-40.9)
Baby's Birth Weight (grams)				
Low Birth Weight (<2500 g)	331	187	46.6	(37.4-55.8)
Normal Birth Weight (≥2500 g)	5,491	3,189	48.6	(46.6-50.6)
Site of Prenatal Care Visit				
Hospital Clinic	1,565	1,026	60.9	(56.8-65.0)
Health Department Clinic	512	387	72.0	(65.3-78.7)
Private Doctor's Office	2,696	1,253	40.4	(37.7-43.1)
Military Facility	238	158	61.1	(50.5-71.7)
Community or Migrant Health Center	250	184	66.5	(55.9-77.1)
Other Clinic	517	345	51.3	(44.0-58.6)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS. Missing responses =198. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

^c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

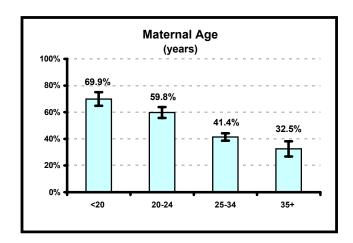
 $^{^{\}mathrm{e}}$ Cash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

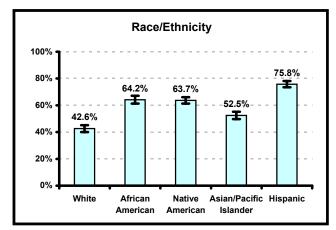
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

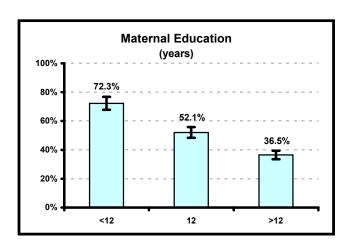
⁹First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups, poverty level,

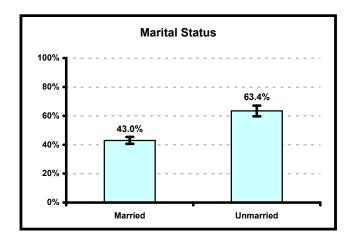
^hNon-Medicaid - women not enrolled in Medicaid.

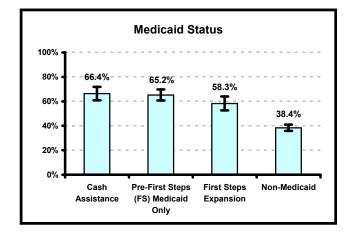
Figure 2.11: Women who reported a prenatal health care provider discussed how to keep from getting HIV (the virus that caused AIDS) Washington State PRAMS 1996-1998











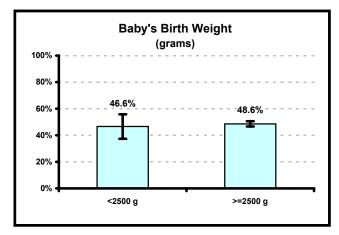
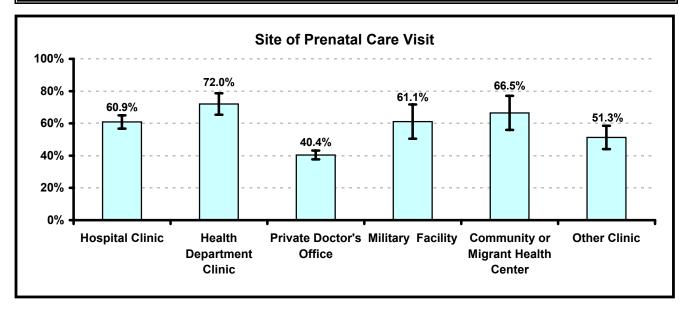


Figure 2.11 (cont'd): Women who reported a prenatal health care provider discussed how to keep from getting HIV (the virus that caused AIDS)
Washington State PRAMS 1996-1998



During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? For each thing, please circle Y (Yes) if someone talked with you about it or N (No) if no one talked with you about it.

Getting your blood tested for HIV (the virus that causes AIDS).
 No (19.4%)

Yes (80.6%)

Summary of Results:

HIV Testing (Table 2.12 & Figure 2.12)

- ☐ The proportion of women who reported a prenatal health care provider discussed with them about getting a blood test for the HIV virus was 80.6 percent. These women were more likely to be:
 - ➤ Unmarried
 - ➤ Medicaid recipients (specifically Cash Assistance)
- ☐ The data show that teenagers (87.2%) were significantly more likely to report a prenatal health care provider talked with them about getting a blood test for the HIV virus compared to women 35 and older (73.5%) and women aged 25 to 34 (78.3%).
- ☐ Hispanic women (88.5%) were significantly more likely to report a prenatal health care provider discussed with them about getting tested for the HIV virus compared to Asian/Pacific Islander women (77.8%) and White women (79.2%).
- □ According to the mother, prenatal health care providers are more likely to discuss HIV testing with women who had less than a high school education (87.8%) compared to those who were educated beyond high school (76.2%).
- ☐ Women who went to a military facility for prenatal care were significantly more likely to say a prenatal health care provider talked with them about getting a blood test for the HIV virus (94.4%) compared to other prenatal care sites.
- ☐ Women who reported a prenatal health care provider discussed how to keep from getting HIV did not significantly differ by the infant's birth weight status.

Table 2.12: Women who reported a prenatal health care provider discussed them getting a blood test for HIV (the virus that causes AIDS)

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,860)	(n= 4,877)	(%= 80.6)	(79.0-82.2)
Maternal Age				
<20 years	985	867	87.2	(83.5-90.9)
20-24 years	1,516	1,312	85.3	(82.4-88.2)
25-34 years	2,797	2,261	78.3	(75.9-80.7)
35+ years	561	436	73.5	(67.8-79.2)
Race/Ethnicity				
White	1,393	1,098	79.2	(77.0-81.4)
African American	942	813	85.9	(83.7-88.1)
Native American	1,216	1,055	87.0	(85.4-88.6)
Asian/Pacific Islander	1,146	883	77.8	(75.4-80.2)
Hispanic	1,163	1,028	88.5	(86.7-90.3)
Maternal Education ^c				
<12 years	1,266	1,130	87.8	(84.5-91.1)
12 years	1,666	1,411	82.4	(79.5-85.3)
>12 years	2,301	1,812	76.2	(73.7-78.7)
Marital Status				
Married	3,757	3,022	77.8	(75.8-79.8)
Unmarried	2,094	1,846	88.0	(85.5-90.5)
Medicaid Status				
Medicaid ^d	3,079	2,679	85.3	(83.1-87.5)
Cash Assistance ^e	1,092	964	88.4	(84.9-91.9)
Pre-First Steps (FS) Medicaid Onlyf	1,217	1,068	85.0	(81.5-88.5)
First Steps Expansion ⁹	770	647	82.1	(77.6-86.6)
Non-Medicaid ^h	2,765	2,184	77.6	(75.2-80.0)
Baby's Birth Weight (grams)				
Low Birth Weight (<2500 g)	332	285	87.7	(81.8-93.6)
Normal Birth Weight (<u>></u> 2500 g)	5,514	4,580	80.2	(78.4-82.0)
Site of Prenatal Care Visit				
Hospital Clinic	1,575	1,375	88.0	(85.3-90.7)
Health Department Clinic	513	457	87.7	(83.0-92.4)
Private Doctor's Office	2,706	2,093	75.6	(73.2-78.0)
Military Facility	239	225	94.4	(89.5-99.3)
Community or Migrant Health Center	251	224	89.8	(83.3-96.3)
Other Clinic	519	460	85.8	(80.3-91.3)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS. Missing responses =174. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

^c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

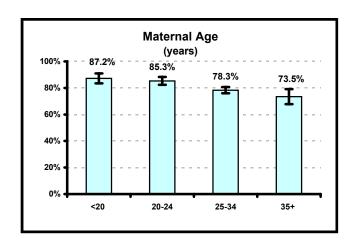
^eCash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

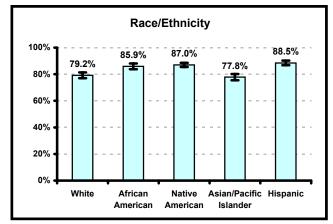
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

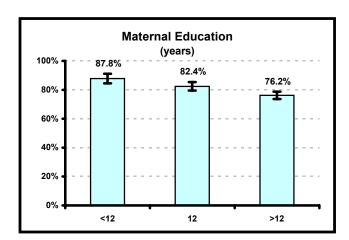
⁹First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups. poverty level,

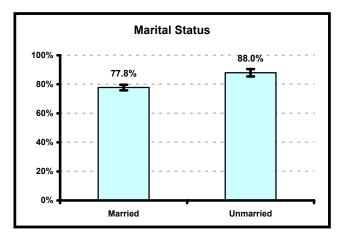
^hNon-Medicaid - women not enrolled in Medicaid.

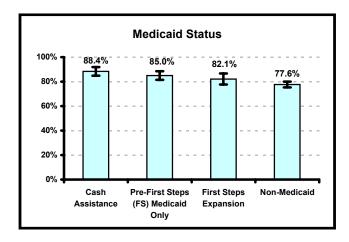
Figure 2.12: Women who reported a prenatal health care provider discussed them getting a blood test for HIV (the virus that causes AIDS) Washington State PRAMS 1996-1998











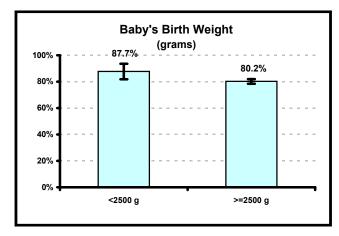
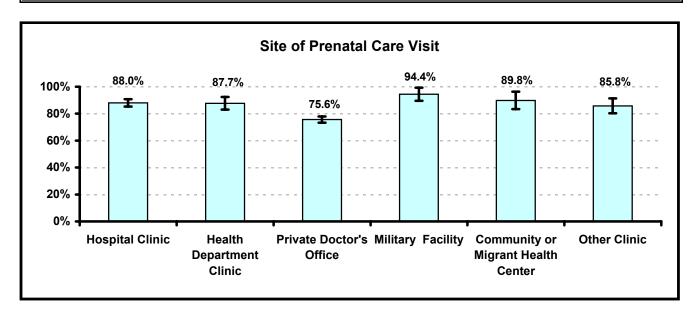


Figure 2.12 (cont'd): Women who reported a prenatal health care provider discussed them getting a blood test for HIV (the virus that causes AIDS)
Washington State PRAMS 1996-1998



During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? For each thing, please circle Y (Yes) if someone talked with you about it or N (No) if no one talked with you about it.

m. Physical abuse to women by their husbands or partners

No (69.1%)

Yes (30.9%)

Summary of Results:

Physical Abuse by a Husband or Partner (Table 2.13 & Figure 2.13)

- □ Nearly one-third (30.9%) of women reported a prenatal health care provider talked with them about physical abuse to women by their husbands or partners. These women were more likely to be:
 - Hispanic
 - Women with less than 12 years of education
 - Unmarried
 - Medicaid recipients (specifically Pre-First Steps Medicaid Only)
- ☐ According to the PRAMS data, teenagers (41.7%) were significantly more likely to report a prenatal health care provider talked with them about physical abuse by husband or partner compared to women aged 25 to 34 (26.0%) and women 35 years or older (26.2%).
- Fifty-nine percent of women who received prenatal care services at a health department clinic said a prenatal health care provider talked with them about physical abuse to women by a husband or partner. This proportion was significantly higher than those who received prenatal care services at a private doctor's office (22.9%), hospital clinic (38.4%), military facility (40.1%), and a clinic listed as "other clinic" (40.8%).
- ☐ The proportion of women who said a prenatal health care provider discussed with them about physical abuse to women by a husbands or partner did not significantly differ by the infant's birth weight status.

Table 2.13: Women who reported a prenatal health care provider discussed physical abuse to women by their husbands or partners

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,839)	(n= 2,259)	(%= 30.9)	(29.1-32.7)
Maternal Age				
<20 years	987	479	41.7	(36.4-47.0)
20-24 years	1,506	677	37.7	(33.8-41.6)
25-34 years	2,788	925	26.0	(23.6-28.4)
35+ years	557	178	26.2	(20.9-31.5)
Race/Ethnicity				
White	1,388	346	25.2	(22.8-27.6)
African American	943	389	41.5	(38.6-44.4)
Native American	1,209	462	39.3	(36.8-41.8)
Asian/Pacific Islander	1,139	392	35.7	(33.0-38.4)
Hispanic	1,160	670	58.1	(55.4-60.8)
Maternal Education ^c				
<12 years	1,266	713	50.2	(45.5-54.9)
12 years	1,658	679	32.3	(29.0-35.6)
>12 years	2,297	617	23.2	(20.7-25.7)
Marital Status				
Married	3,741	1,294	27.8	(25.8-29.8)
Unmarried	2,089	962	39.3	(35.6-43.0)
Medicaid Status				
Medicaid ^d	3,071	1,523	42.8	(39.9-45.7)
Cash Assistance ^e	1,091	502	40.1	(34.6-45.6)
Pre-First Steps (FS) Medicaid Only ^f	1,210	634	46.4	(41.9-50.9)
First Steps Expansion ⁹	770	387	40.5	(35.2-45.8)
Non-Medicaid ^h	2,752	728	22.8	(20.6-25.0)
Baby's Birth Weight (grams)				
Low Birth Weight (<2500 g)	331	132	33.7	(25.3-42.1)
Normal Birth Weight (≥2500 g)	5,494	2,119	30.7	(28.9-32.5)
Site of Prenatal Care Visit				
Hospital Clinic	1,570	706	38.4	(34.5-42.3)
Health Department Clinic	511	308	59.0	(51.9-66.1)
Private Doctor's Office	2,696	735	22.9	(20.5-25.3)
Military Facility	238	101	40.1	(29.7-50.5)
Community or Migrant Health Center	248	133	51.6	(41.0-62.2)
Other Clinic	519	248	40.8	(33.7-47.9)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State

birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS. Missing responses =195. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

^c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

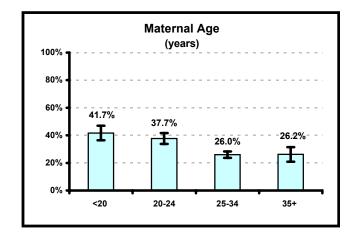
 $^{^{\}mathrm{e}}$ Cash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

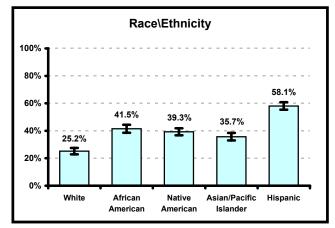
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

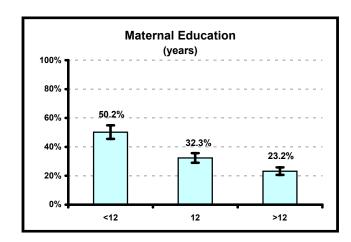
⁹First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups, poverty level,

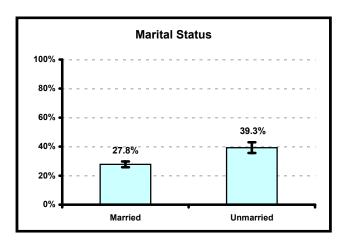
^hNon-Medicaid - women not enrolled in Medicaid.

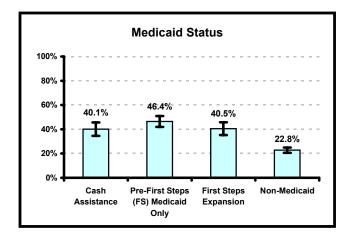
Figure 2.13: Women who reported a prenatal health care provider discussed physical abuse to women by their husbands or partners
Washington State PRAMS 1996-1998











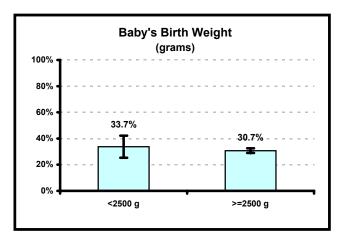
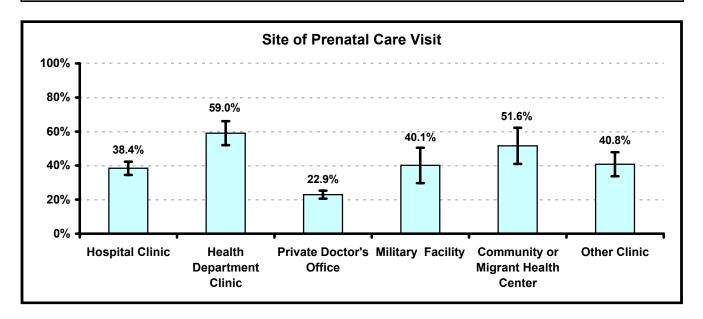


Figure 2.13 (cont'd): Women who reported a prenatal health care provider discussed physical abuse to women by their husbands or partners Washington State PRAMS 1996-1998



At any time during your pregnancy, did a doctor, nurse, or other health care worker *talk to you* about the following things? For each thing, circle Y (Yes) if it applied to you, N (No) if it does not apply to you, or DK (don't know) if you are unsure.

a. "Baby blues" or postpartum depression

No (31.4%)

Yes (68.6%)

Summary of Results:

Postpartum Depression (Table 2.14 & Figure 2.14)

- □ Nearly seventy percent (68.6%) of women reported a prenatal health care provider talked with them about the "baby blues" or postpartum depression. These women were more likely to be:
 - Teenagers
 - Unmarried
 - Medicaid recipients (specifically Cash Assistance)
- ☐ Three-fourths (75.4%) of Native American women reported a prenatal health care provider talked with them about postpartum depression. This proportion was significantly higher than what was observed for Hispanic women (64.4%), Asian/Pacific Islander women (65.1%), and White women (69.1%).
- ☐ Women who went to a clinic listed as "other choice" for prenatal care were significantly more likely to report a prenatal health care provider discussed postpartum depression (77.8%) compared to those who went to a private doctor's office for prenatal care (66.5%).
- ☐ Maternal education and the infant's birth weight status were not significantly associated with women's report that a prenatal health care provider discussed about postpartum depression.

Table 2.14: Women who reported a prenatal health care provider discussed "baby blues" or postpartum depression

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,653)	(n= 3,924)	(%= 68.6)	(66.6-70.6)
Maternal Age				
<20 years	970	756	78.1	(73.8-82.4)
20-24 years	1,466	1,071	69.7	(65.8-73.6)
25-34 years	2,686	1,768	66.6	(63.9-69.3)
35+ years	530	329	64.3	(58.2-70.4)
Race/Ethnicity				
White	1,367	942	69.1	(66.6-71.6)
African American	921	676	73.9	(71.2-76.6)
Native American	1,214	913	75.4	(73.2-77.6)
Asian/Pacific Islander	1,062	691	65.1	(62.4-67.8)
Hispanic	1,089	702	64.4	(61.7-67.1)
Maternal Education ^c				
<12 years	1,215	843	69.9	(65.6-74.2)
12 years	1,609	1,169	68.5	(65.0-72.0)
>12 years	2,242	1,524	68.6	(65.7-71.5)
Marital Status				
Married	3,583	2,365	65.7	(63.3-68.1)
Unmarried	2,062	1,557	76.5	(73.4-79.6)
Medicaid Status				
Medicaid ^d	2,959	2,125	70.4	(67.7-73.1)
Cash Assistance ^e	1,078	824	78.0	(73.5-82.5)
Pre-First Steps (FS) Medicaid Only ^f	1,162	820	70.4	(66.3-74.5)
First Steps Expansion ⁹	719	481	60.8	(54.9-66.7)
Non-Medicaid ^h	2,678	1,788	67.5	(65.0-70.0)
Baby's Birth Weight (grams)				
Low Birth Weight (<2500 g)	325	215	62.4	(53.4-71.4)
Normal Birth Weight (≥2500 g)	5,313	3,697	69.0	(67.0-71.0)
Site of Prenatal Care Visit				
Hospital Clinic	1,484	1,075	72.7	(69.0-76.4)
Health Department Clinic	456	300	67.9	(61.2-74.6)
Private Doctor's Office	2,624	1,750	66.5	(64.0-69.0)
Military Facility	231	180	76.0	(66.8-85.2)
Community or Migrant Health Center	228	154	62.1	(51.5-72.7)
Other Clinic	501	396	77.8	(71.7-83.9)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS. Missing responses =381. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

^c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

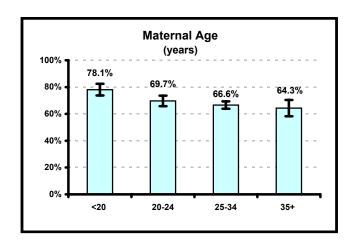
 $^{^{\}mathrm{e}}$ Cash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

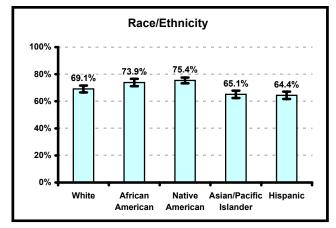
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

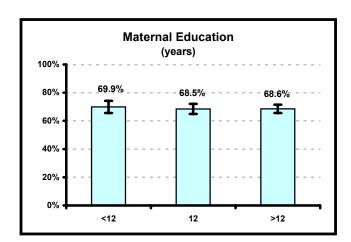
⁹First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups, poverty level,

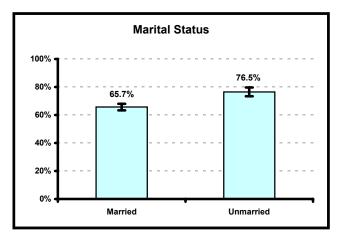
^hNon-Medicaid - women not enrolled in Medicaid.

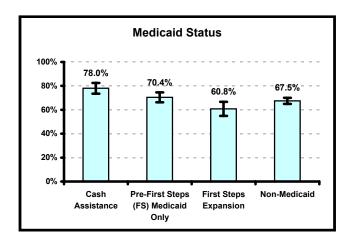
Figure 2.14: Women who reported a prenatal health care provider discussed "baby blues" or postpartum depression











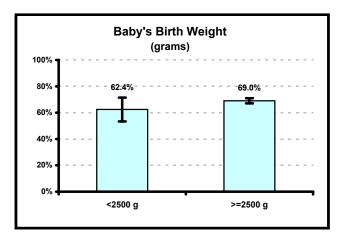
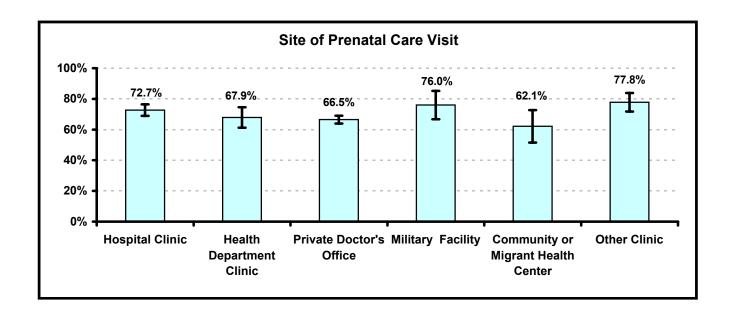


Figure 2.14 (cont'd): Women who reported a prenatal health care provider discussed "baby blues" or postpartum depression
Washington State PRAMS 1996-1998



Survey Question #56:

At any time during your pregnancy, did a doctor, nurse, or other health care worker *talk to you* about the following things? For each thing, circle Y (Yes) if it applied to you, N (No) if it does not apply to you, or DK (don't know) if you are unsure.

b. How much weight you should gain during your pregnancy.

No (12.1%)

Yes (87.9%)

Summary of Results:

Weight Gain during Pregnancy (Table 2.15 & Figure 2.15)

Around ninety percent (87.9%) of women reported a prenatal health care provider talked with them about how much weight they should gain during pregnancy.
Women who had more than a high school education were significantly more likely to report a prenatal health care provider talked with them about weight gain during pregnancy (88.6%) compared to those who had only a high school education (87.0%).
Among the women who went to a hospital clinic for prenatal care, 90.0 percent of them said a prenatal health care provider discussed weight gain during pregnancy. This percentage was significantly higher among women who went to a community or migrant health center (77.6%) for prenatal care services.
The following indicators were not significantly associated with women's report that a

prenatal health care provider discussed weight gain during pregnancy: maternal age, race/ethnicity, marital status, Medicaid status, and the infant's birth weight status.

Table 2.15: Women who reported a prenatal health care provider discussed weight gain during pregnancy

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,829)	(n= 5,157)	(%= 87.9)	(86.5-89.3)
Maternal Age				
<20 years	994	904	89.8	(86.5-93.1)
20-24 years	1,501	1,321	86.3	(83.4-89.2)
25-34 years	2,779	2,458	88.3	(86.5-90.1)
35+ years	554	474	87.3	(83.2-91.4)
Race/Ethnicity				
White	1,395	1,226	87.8	(86.0-89.6)
African American	943	848	90.0	(88.2-91.8)
Native American	1,225	1,084	88.2	(86.6-89.8)
Asian/Pacific Islander	1,143	1,014	88.8	(87.0-90.6)
Hispanic	1,123	985	87.6	(85.6-89.6)
Maternal Education ^c				
<12 years	1,242	1,086	86.6	(83.3-89.9)
12 years	1,671	1,473	87.0	(84.5-89.5)
>12 years	2,297	2,053	88.6	(86.6-90.6)
Marital Status				
Married	3,707	3,267	87.7	(86.1-89.3)
Unmarried	2,112	1,881	88.3	(85.8-90.8)
Medicaid Status				
Medicaid ^d	3,051	2,709	87.1	(84.9-89.3)
Cash Assistance ^e	1,099	982	88.3	(84.6-92.0)
Pre-First Steps (FS) Medicaid Onlyf	1,195	1,070	87.0	(83.9-90.1)
First Steps Expansion ⁹	757	657	85.8	(81.7-89.9)
Non-Medicaid ^h	2,762	2,434	88.4	(86.6-90.2)
Baby's Birth Weight (grams)				
Low Birth Weight (<2500 g)	337	295	87.2	(80.9-93.5)
Normal Birth Weight (≥2500 g)	5,477	4,847	87.9	(86.5-89.3)
Site of Prenatal Care Visit				
Hospital Clinic	1,538	1,386	90.0	(87.5-92.5)
Health Department Clinic	479	419	87.3	(82.6-92.0)
Private Doctor's Office	2,686	2,369	88.3	(86.5-90.1)
Military Facility	236	208	86.2	(78.6-93.8)
Community or Migrant Health Center	244	210	77.6	(67.8-87.4)
Other Clinic	504	455	88.1	(83.2-93.0)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS. Missing responses =205. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

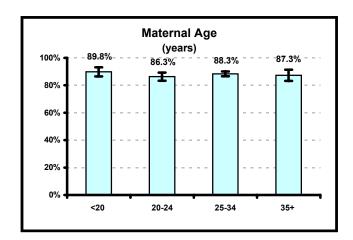
eCash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

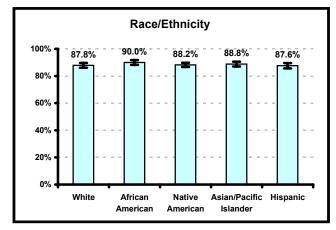
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

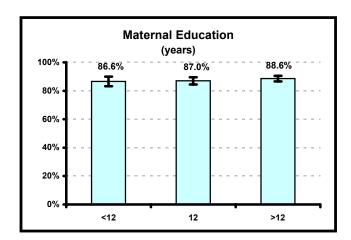
First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups, poverty level,

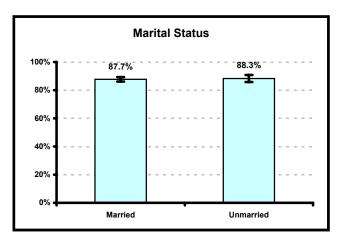
^hNon-Medicaid - women not enrolled in Medicaid.

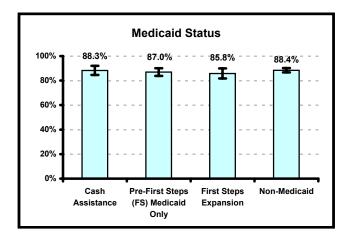
Figure 2.15: Women who reported a prenatal health care provider discussed weight gain during pregnancy











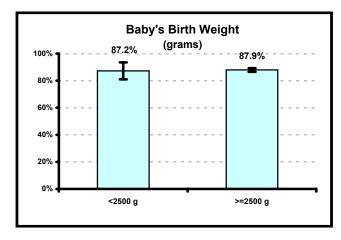
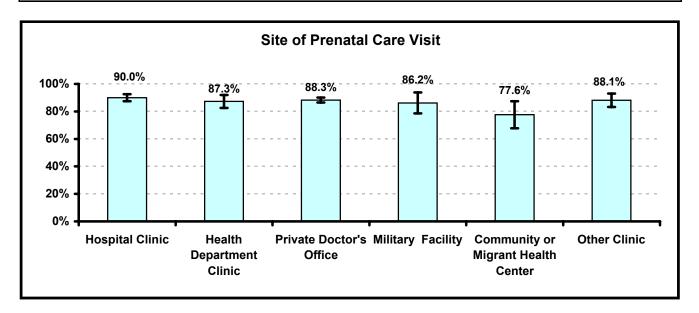


Figure 2.15 (cont'd): Women who reported a prenatal health care provider discussed weight gain during pregnancy



Survey Question #56:

At any time during your pregnancy, did a doctor, nurse, or other health care worker *talk to you* about the following things? For each thing, circle Y (Yes) if it applied to you, N (No) if it does not apply to you, or DK (don't know) if you are unsure.

c. Diseases or birth defects that could run in your family or your husband or partner's family.

No (19.9%)

Yes (80.1%)

Summary of Results:

Family History of Diseases or Birth Defects (Table 2.16 & Figure 2.16)

- ☐ Approximately 80.1 percent of women said a prenatal health care provider talked with them about diseases or birth defects that could run in their family or their husband's or partner's family.
- ☐ African American women (83.8%) were significantly more likely to report a prenatal health care provider talked with about diseases or birth defects that could run in their family or their husband's or partner's family compared to Asian/Pacific Islander women (78.0%).
- ☐ The following indicators were not associated with women's report of prenatal health care provider discussion about having a family history of genetic diseases or birth defects: maternal age, maternal education, marital status, Medicaid status, the infant's birth weight status, and the site of prenatal care visit.

Table 2.16: Women who reported a prenatal health care discussed genetic diseases or birth defects that could run in their family or their husband's or partner's family

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,765)	(n= 4,635)	(%= 80.1)	(78.5-81.7)
Maternal Age				
<20 years	974	788	80.1	(75.6-84.6)
20-24 years	1,488	1,222	82.8	(79.7-85.9)
25-34 years	2,743	2,158	78.6	(76.2-81.0)
35+ years	559	466	82.0	(77.1-86.9)
Race/Ethnicity				
White	1,375	1,107	80.3	(78.1-82.5)
African American	941	789	83.8	(81.4-86.2)
Native American	1,206	975	80.7	(78.7-82.7)
Asian/Pacific Islander	1,117	871	78.0	(75.6-80.4)
Hispanic	1,126	893	79.2	(76.8-81.6)
Maternal Education ^c				
<12 years	1,236	965	77.7	(73.8-81.6)
12 years	1,646	1,342	80.1	(77.0-83.2)
>12 years	2,271	1,858	81.9	(79.5-84.3)
Marital Status				
Married	3,671	2,934	80.0	(78.0-82.0)
Unmarried	2,084	1,694	80.4	(77.3-83.5)
Medicaid Status				
Medicaid ^a	3,027	2,410	79.2	(76.7-81.7)
Cash Assistance ^e	1,083	867	79.2	(74.5-83.9)
Pre-First Steps (FS) Medicaid Onlyf	1,190	956	81.4	(77.9-84.9)
First Steps Expansion ⁹	754	587	76.0	(71.1-80.9)
Non-Medicaid ^h	2,722	2,214	80.8	(78.6-83.0)
Baby's Birth Weight (grams)				
Low Birth Weight (<2500 g)	337	270	76.8	(68.8-84.8)
Normal Birth Weight (<u>></u> 2500 g)	5,413	4,351	80.3	(78.5-82.1)
Site of Prenatal Care Visit				
Hospital Clinic	1,525	1,263	82.6	(79.5-85.7)
Health Department Clinic	476	354	75.9	(70.0-81.8)
Private Doctor's Office	2,651	2,140	81.1	(78.9-83.3)
Military Facility	231	203	81.4	(72.6-90.2)
Community or Migrant Health Center	239	183	70.7	(60.3-81.1)
Other Clinic	508	412	77.1	(70.6-83.6)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS. Missing responses =269. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

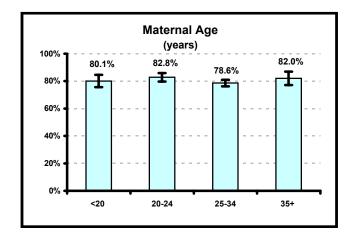
 $^{^{\}mathrm{e}}$ Cash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

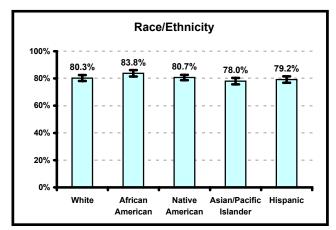
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

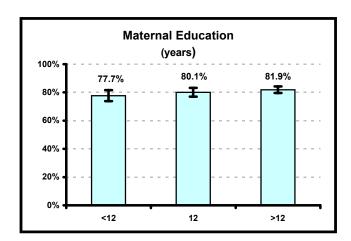
⁹First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups. poverty level,

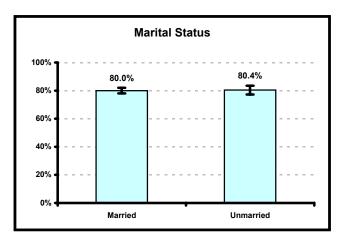
^hNon-Medicaid - women not enrolled in Medicaid.

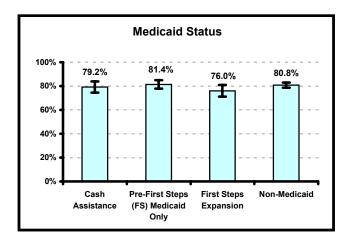
Figure 2.16: Women who reported a prenatal health care provider discussed genetic diseases or birth defects that could run in their family or their husband's or partner's family











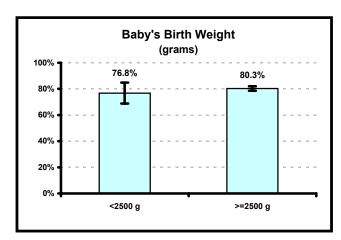
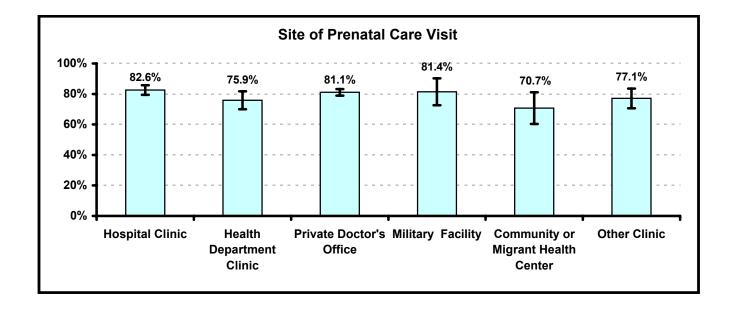


Figure 2.16 (cont'd): Women who reported a prenatal health care provider discussed genetic diseases or birth defects that could run in their family or their husband's or partner's family



Survey Question #56:

At any time during your pregnancy, did a doctor, nurse, or other health care worker *talk to you* about the following things? For each thing, circle Y (Yes) if it applied to you, N (No) if it does not apply to you, or DK (don't know) if you are unsure.

d. Tests that could be done during your pregnancy to see if your baby had a birth defect or genetic disease

No (10.4%)

Yes (89.6%)

Summary of Results:

Testing for Birth Defects or Genetic Diseases during Pregnancy (Table 2.17 & Figure 2.17)

- ☐ Almost 90 percent (89.6%) of women said a prenatal health care provider discussed with them about tests that could be done during pregnancy to see if their baby had a birth defect or genetic disease. These women were more likely to be:
 - ➤ Women 35 years or older
 - Married
 - Non-Medicaid Recipients
- ☐ The proportion of women who said a prenatal health care provider discussed with them about testing their baby for birth defects or genetic diseases during pregnancy was significantly higher for White women (90.8%) compared to Hispanic women (84.2%) and Native American women (82.3%).
- Approximately 92.4 percent of women who were educated beyond high school said a prenatal health care provider talked with them about testing their baby for birth defects or genetic diseases during pregnancy. This proportion was significantly higher than for women who had less than a high school education (81.1%).
- ☐ Almost ninety-one percent (90.6%) of women who went to a private doctor's office for prenatal care also reported a prenatal health care provider talked with them about testing their baby for birth defects or genetic diseases during their pregnancy.
- ☐ PRAMS data show that the proportion of women who reported prenatal health care provider discussion about testing for birth defects or genetic diseases during pregnancy did not significantly vary by the infant's birth weight status or their site of prenatal care visit.

Table 2.17: Women who reported a prenatal care provider discussed tests that could be done during pregnancy to see if their baby had a birth defect or genetic disease

Maternal	Respondents	Yes	% Yes ^b	95% CI
Characteristics ^a	(n= 5,803)	(n= 5,054)	(%= 89.6)	(88.4-90.8)
Maternal Age				
<20 years	980	808	83.1	(79.0-87.2)
20-24 years	1,499	1,277	87.1	(84.4-89.8)
25-34 years	2,763	2,437	91.1	(89.5-92.7)
35+ years	560	532	96.1	(93.9-98.3)
Race/Ethnicity				
White	1,390	1,267	90.8	(89.2-92.4)
African American	930	833	89.0	(87.0-91.0)
Native American	1,211	1,000	82.3	(80.3-84.3)
Asian/Pacific Islander	1,128	990	87.4	(85.4-89.4)
Hispanic	1,144	964	84.2	(82.0-86.4)
Maternal Education ^c				
<12 years	1,253	1,008	81.1	(77.4-84.8)
12 years	1,646	1,430	89.2	(86.8-91.6)
>12 years	2,285	2,086	92.4	(90.8-94.0)
Marital Status				
Married	3,706	3,305	91.6	(90.4-92.8)
Unmarried	2,087	1,741	84.0	(81.1-86.9)
Medicaid Status				
Medicaid ^d	3,036	2,521	84.4	(82.2-86.6)
Cash Assistance ^e	1,078	889	83.3	(79.0-87.6)
Pre-First Steps (FS) Medicaid Only ^f	1,197	993	86.0	(82.9-89.1)
First Steps Expansion ^g	761	639	83.2	(78.9-87.5)
Non-Medicaid ^h	2,751	2,524	93.1	(91.7-94.5)
Baby's Birth Weight (grams)				
Low Birth Weight (<2500 g)	336	289	86.3	(80.0-92.6)
Normal Birth Weight (<u>></u> 2500 g)	5,452	4,751	89.7	(88.5-90.9)
Site of Prenatal Care Visit				
Hospital Clinic	1,527	1,344	90.2	(87.8-92.6)
Health Department Clinic	471	385	85.4	(80.9-89.9)
Private Doctor's Office	2,671	2,368	90.6	(89.0-92.2)
Military Facility	233	217	90.3	(83.4-97.2)
Community or Migrant Health Center	246	199	77.2	(68.2-86.2)
Other Clinic	513	445	89.6	(85.1-94.1)

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS. Missing responses =231. CI = Confidence Interval. White includes other/unknown (3.5%).

^bPercentage weighted to Washington State Birth Population (Total N = 207,831).

c10% or more of the maternal education data are missing from birth certificate data.

^dMedicaid - women on Cash Assistance, Pre-First Steps (FS) Medicaid Only, or First Steps Expansion.

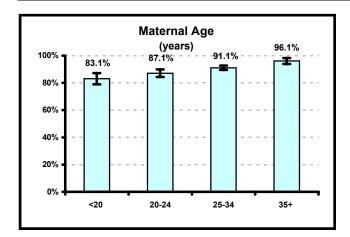
^eCash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

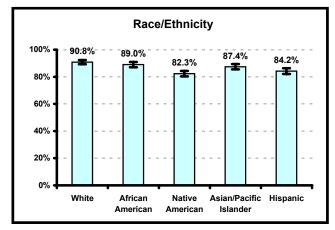
^fPre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only. This group includes women not eligible for cash assistance.

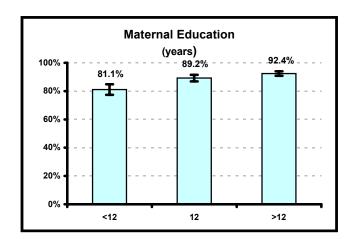
First Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups, poverty level,

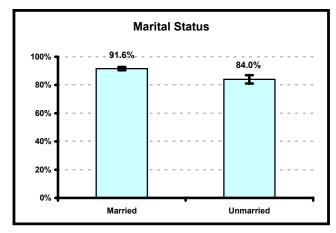
^hNon-Medicaid - women not enrolled in Medicaid.

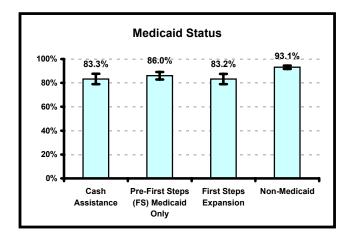
Figure 2.17: Women who reported a prenatal care provider discussed tests that could be done during pregnancy to see if their baby had a birth defect or genetic disease











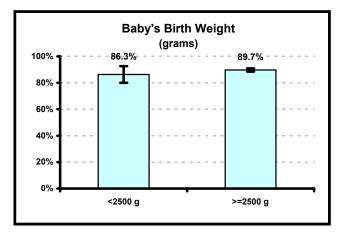
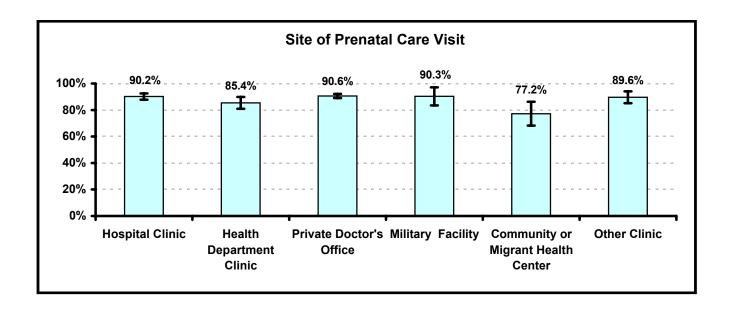


Figure 2.17: Women who reported a prenatal care provider discussed tests that could be done during pregnancy to see if their baby had a birth defect or genetic disease



APPENDICES

WASHINGTON STATE PRAMS 1996-1998



Data Collection

Methodology

Data Sources. Three data sources are used to create a final, weighted PRAMS analysis data set: birth certificate data, operational data, and questionnaire data. The PRAMS analysis data set cannot be produced unless all three sources of data are in place.¹

- *i.* Birth Certificate Data. Birth certificates are essential to PRAMS data collection for three reasons: 1) They provide the sampling frame from which births are stratified and then randomly selected for PRAMS surveillance; 2) PRAMS data collected from mothers are weighted with birth certificate information; and 3) Birth certificates serve as a source of demographic and clinical information about the sampled mother and the infant in Washington State.
- ii. Operational Data. PRAMS operational data are generated by PRAMTrac, a customized tracking software program developed by the CDC to assist the Project Coordinator and the Data Manager in PRAMS activities. PRAMTrac is supplied to states by CDC; CDC provides training in the use of the software. PRAMTrac aids in monitoring data collection activities for each batch and generates monthly batch reports that summarize the results of the data collection effort. Sampled women are tracked until they either complete a questionnaire or are classified as a non-respondent. Operational data generated by PRAMTrac are used to calculate response rates to monitor the quality of operations. They are also used for analysis of PRAMS survey methodology.
- *Questionnaire Data.* Self-reported data from sampled women are collected by mail and by telephone. The PRAMS questionnaire serves as the principal source of maternal behavioral information for the time before, during, and after the mother's most recent pregnancy.

Method of Surveillance. Standardized data collection methods for the PRAMS survey were developed by CDC to allow for comparisons among states and for single-state or multi-state analysis.² PRAMS is a "mixed mode" surveillance system that combines two modes of data collection. The mailed questionnaire is the primary data collection method. Up to two self-administered surveys are mailed to sampled women, and then multiple attempts to follow-up nonrespondents are conducted by telephone.^{1,2,3} The methodology behind mail/telephone survey methods used by CDC is based on research conducted by Don Dillman.⁴ One key component of his approach is to make numerous and varied random contacts with sample mothers.^{3,4}

Data Collection Instruments

The PRAMS Questionnaire. In 1987, Phase 1 of the PRAMS questionnaire was developed with the aid of numerous individuals within and outside of CDC. To create the questionnaire, an extensive list of potential topics were identified and researched by staff in the Division of Reproductive Health at CDC. From this list, questions were developed and pretested using cognitive techniques and revised according to pretest results. This questionnaire was used by the original PRAMS states from Fall 1988 until it was revised in 1989.^{1,2}

In 1989, the Phase 1 questionnaire was evaluated and revised by CDC and participating states. This revision resulted in the Phase 2 questionnaire, which was implemented in 1990. Although the questionnaire maintained its original structure, selected questions were revised, some were deleted, and new questions were added. ^{1,2}

In 1994, CDC collaborated with the participating states to revise and develop a Phase 3 questionnaire. As with the first and second questionnaires, a list of potential topics was extensively researched. The original structure of the questionnaire was retained, but several questions were revised, dropped or added. During the revision process, a set of standard state-specific questions was developed. States were able to select questions from the standard set, use existing state-developed questions, or develop new questions of their own. \(^1\)

The Phase 3 questionnaire is 14 pages in length and has a colorful cover designed by Washington State PRAMS staff. This questionnaire is slightly smaller than an 8 1/2" x 11" sheet of paper, and contains an extra page for comments from the mother. The questionnaire contains a total of 66 questions; the first 52 questions are core questions and the remaining 14 are state-specific questions.

The data for this report, which is from the surveillance period April 1996 through December 1998, have been drawn from the Phase 3 questionnaire.

Criteria for Selection of Questions. The following criteria were used to determine the content areas of the questionnaire ¹:

	The usefulness of the information to develop and target specific interventions to reduce infant morbidity and mortality.
	The likelihood that valid information can be collected from the mother two to six months after delivery.
	The estimated prevalence of the behavior, attitude, or experience.
	The availability of state-level information from other data sources.
	The importance of the information as a co-variate for the association between behavior, attitude, or experience, and infant morbidity and mortality.
П	The likelihood that sensitive information can be elicited from the mother

	The state's need for the information for the year 2010 health objectives or other program needs.
Types o	of Questions
_	stions. The core portion of the survey is used by all participating PRAMS states and the following topic areas:
	Obstetric history/risk factors: a history of previous live births, low birth weight newborn, premature delivery; confirmation of pregnancy status, prepregnancy weight and height.
	Mother's feelings about the timing of pregnancy
	Maternal economic status: Health insurance participation, Medicaid participation, WIC participation, housing density, household size after delivery, and sources of family income.
	Birth control utilization at conception
	Prenatal care: Timing of prenatal care initiation, satisfaction with prenatal care, barriers to prenatal care, number of prenatal care visits per month, site of prenatal care visit, source of prenatal care payment, and prenatal provider discussion of maternal risk behaviors.
	Folic acid awareness
	Prenatal maternal behaviors and experiences: Cigarette smoking, alcohol use, psychosocial stress during the 12 months prior to delivery, and physical abuse before and during pregnancy.
	Prenatal hospitalization
	Labor and delivery for mother and infant: Hospital length of stay for mother and infant, source of payment for delivery

State-Developed questions. The state-specific portion is composed of questions developed by the Washington State PRAMS Advisory Committee to meet Washington State's needs. The process for developing the questions involved: committee selection of high priority topics; development of questions pertaining to the priority topics; revision of questions to fit a survey format; and ranking questions to determine those to be included in the survey. After the questions were selected, the state-specific questions were pre-tested with a variety of individuals from various backgrounds. The Washington state-specific component covers the following topic areas:

☐ **Infant health:** Neonatal Intensive Care Unit (NICU) utilization, breast-feeding,

infant smoke exposure, sleep position, well and ill baby care

Mother's perception of husband or partner's feelings about timing of the pregnancy
Household size and income at conception
Prenatal health care provider discussion of maternal risk behaviors: Postpartum depression, weight gain during pregnancy, family history of diseases or birth defects and genetic testing for birth defects or genetic diseases
Social support availability for mother during pregnancy and after delivery
Emotional support by husband or partner during pregnancy
Hospital length of stay after delivery for mother
Postpartum birth control utilization
Infant safety: smoke alarm in home, water heater temperature, car seat use, and firearms in home

Mode of Questionnaire Administration. Survey methodology emphasized the importance of using the appropriate questionnaire format for the mode in which the respondent will complete the questionnaire. Because PRAMS employs two modes, two types of questionnaire are required.¹

- *i.* Self-administered Questionnaire. In mail surveillance, the self-administered questionnaire booklet is mailed to all sampled women. The questionnaire is designed to be read and filled out by the respondent without the presence of an interviewer. All instructions and skips are clearly noted in the booklet so that the respondent can complete the questionnaire by herself.
- *ii. Interviewer-administered Questionnaire.* In telephone follow-up, however, an interviewer must administer the questionnaire. Therefore, the layout must be formatted differently than the self-administered questionnaire. The interviewer-administered questionnaire includes prompts and instructions for the interviewer that are not read aloud to the respondent. The interviewer-administered questionnaire format ensures that all interviewers deliver questions and instructions uniformly and consistently with the self-administered questionnaire.

Translation of Questionnaires. The Washington State PRAMS questionnaire is available in English and Spanish. Formatting and appearance are the same in both versions of the questionnaire. Translation of the PRAMS questionnaires (mail and telephone versions) into Spanish are completed by CDC, with state reviewers. Translation of the questionnaires by a single source ensure consistency of question content across all states and populations.

Data Collection Procedures

Timing and Contacts. Every month, a stratified random sample of 100-250 new mothers (who are two to six months postpartum) is selected from a frame of eligible Washington State birth certificates to be used for the PRAMS survey. As multiple contacts have been demonstrated to increase response rates,⁴ this methodology is employed in PRAMS. Below is the sequence of contacts for Washington State PRAMS surveillance.^{1,2,3}

- *i. Preletter.* The preletter is mailed to all sampled mothers. The preletter introduces the mother to PRAMS and informs her that she will be receiving a PRAMS questionnaire packet in the mail.
- *ii. Initial PRAMS Questionnaire Packet.* The initial mail questionnaire packet is sent to all sampled mothers 7 days after the preletter. The packet contains the following items: a personalized letter explaining PRAMS; the 14-page questionnaire booklet containing a self-addressed stamped enveloped; a question-and-answer brochure that contains addition information and answers to questions frequently asked about PRAMS; a calendar, as a memory aid; and a participation incentive.
- *iii. Tickler (Reminder Letter).* The tickler serves as a thank you/reminder letter and is sent to all sampled mothers 10 days after the initial mailing, except for those who have responded, refused, or whose mail has been returned undelivered.
- *iv.* Second Mail Questionnaire Packet. The second mail questionnaire packet is sent 14 days after the tickler to all sampled mothers who have not responded or refused.
- v. Telephone Follow-up. Washington State PRAMS staff telephone mothers who do not respond 14 days after the second mailing of the questionnaire. Interviewers call women to encourage completion of an interviewer-administered survey over the telephone.

Mail/Phone schedule. The Mail/Phone phase of the project is managed by the Operations Manager. The Operations manager coordinates the activities of the Survey Assistants, who assist with the mailings, data entry and telephone interviews. The following is a list of the schedule of events for the Mail/Phone Survey process the batch period¹:

Day 1: Sample batch and create: BCENTRY.DAT, list of long addresses, list of infants at risk of death, list of Medicaid recipients, and a list of Hispanic mothers in sample. Download BCENTRY.DAT into PRAMTrac.
Day 2: Clean up any mothers' records with blank last name, correct addresses, eliminate any out of state residents, etc.
Day 3: Prepare and mail pre-letter. Identify/verify status of at risk infants.

L	multiple births and select which infant to follow in the survey.
	Day 20: Prepare and mail a reminder letter (Tickler).
	Day 34: Prepare and mail second survey with return address packet.
	Day 41: Forward to phone phase. Print a listing of new moms and begin locating phone numbers. Check Internet listings or contact Directory Assistance and Medical Assistance Administration for additional phone listings.
	Day 48: Begin calling moms. During the next 3 weeks, at least 15 attempts are made to contact the mother. Calls are made during the morning, afternoon and evening, seven days a week. Calls are conducted both to English and Spanish speaking survey recipients.
	Day 75: Clean up, close the batch, and export the files to CDC as identified in CDC instructions.

References:

¹ <u>Pregnancy Risk Assessment Monitoring System (PRAMS): CDC Model Surveillance Protocol 1999.</u> Maternal and Child Health Assessment Section, Community and Family Health, Washington State Department of Health, 1999.

² <u>Pregnancy Risk Assessment Monitoring System (PRAMS) Surveillance Report: 1993-1994.</u> Maternal Health Assessment Section, Community and Family Health, Washington State Department of Health, 1996.

³ Colley Gilbert B, Johnson CH, Morrow B, Ahluwalia IB, Gaffield ME, Fischer L, Rogers M, Whitehead N. PRAMS 1997 Surveillance Report. Atlanta, GA: Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 1999.

⁴ Dillman DA. Mail and telephone surveys: the total design method. New York: John Wiley & Sons, 1978.



Sampling and Weighting Process

The purpose of the PRAMS data is to provide state-specific estimates of maternal and child health indicators for Washington State mothers who delivered a live born infant.

Sampling Process

Producing a sample of mothers has two steps: constructing the frame and drawing the sample.

Constructing the Sampling Frame. The sampling frame is prepared from monthly batches of Washington State birth certificates. Birth data are read into a SAS file that creates five categories by race/ethnicity. The sampling frame is then created by excluding records for the following reasons: 1) the infant was born less than 61 days ago (these infants were eligible for inclusion in a later sampling frame) or more than 151 days from the projected survey arrival date; 2) the infant was born out of state; 3) the mother was not a Washington State resident; 4) the mother's maiden name was missing; or 5) the infant resulted from a multiple birth and was not the one infant from the multiple birth selected for inclusion in the survey. The infant record selected from a multiple birth is based on the correspondence between its order at delivery and the time of year the birth occurred (the first born of twins is selected if the birth occurred January-June, the second born is selected if the birth occurred July-December). (NOTE: Exclusions of Adoptions: If an infant is adopted prior to sampling, the birth record is excluded from the sampling frame. Birth files are amended when an adoption takes place. Adoptions are identified and excluded by Vital Statistics prior to sending the birth certificate date to Washington State PRAMS. Adoptions records are continuously updated). For those infants who were not included in the PRAMS sample, efforts were made to compare their profile as a group to the PRAMS frame and to determine whether the population and sample strata differ significantly from the frame. Mothers of infants who died were included in the frame and were contacted through a separate mailing. Respect for their loss and sensitivity in questioning was considered when contacting these mothers.²

Drawing the sample. Between the 1st and the 5th of every month, the Washington State Center for Health Statistics sends a birth certificate file to be used as input for the PRAMS sampling program. Most of the infants in the birth certificate files are either two or three months of age when sampled by PRAMS and mothers are contacted up to six months postpartum. Sampling on a monthly basis continues to ensure that mothers are contacted in a timely manner and that there is a balanced workload for PRAMS staff. The birth file is sent for weighting on or before September for the previous year. ¹

Sampling Strata

The Washington State PRAMS sample for this report was stratified by race/ethnicity, based on birth certificate information. From April 1996 through December 1998, the five sampling strata of racial/ethnic groups were ethnic Hispanic (of any race), non Hispanic African American,

Asian/Pacific Islander, Native American and the combination of white and other/unknown. Oversampling of subjects by race other than white was conducted to increase the reliability of estimates for these groups.¹

Within each sampling strata, each record has an equal probability of being selected (without replacement). The sampling targets for each stratum were 400 completed surveys, a total of approximately 2,000 surveys per year. This sampling target is CDC PRAMS minimum recommended sample size to enable stratum specific analyses on a yearly basis.¹

Survey Response Rates

From April 1996 through December 1998, 8,563 mothers who delivered infants were sent the Washington State PRAMS survey. Among those mothers who were surveyed, 6,034 (70.5%) responded to the survey. The majority of nonrespondents to the survey were comprised of mothers who did not return the questionnaire or could not be contacted because of incorrect address and/or phone number. Other possible reasons that may explain the survey nonresponse rate are phone and mail refusals, or a language barrier.

In late 1993, Spanish language surveys and Spanish language phone follow-up became available which contributed to an improvement in the Hispanic response rate. Translation to other non-English speaking populations is not available at this time for states participating in PRAMS.

Birth certificate information from non-respondent and respondent mothers to the PRAMS survey, which was administered from April 1996 through December 1998, is displayed in Table 3.1. The results show that maternal attributes associated with a lower survey response rate were maternal age younger than 20, African American and Native American race, unmarried, receiving Medicaid, and having delivered a low birth weight infant (< 2500 grams). However, the survey response rates increased with mother's educational level. Approximately 12.8% of the maternal education data was missing from the Washington State birth certificates.

Response Bias. When survey completion is less than 100 percent and respondents are not representative of the sampled population, response bias can occur. (In most cases, survey respondents are of higher socio-economic status and healthier than are nonrespondents to questionnaires). Response bias can be reduced by ensuring a high response rate. The CDC PRAMS considers a response rate of 70 percent as a minimum threshold below which unacceptable response bias may occur.²

Weighting Process

The Washington State PRAMS survey is designed to provide state estimates about resident mothers who delivered live born infants during the sampling period. Washington State PRAMS data can be weighted to obtain statewide birth population estimates, because the data are based on a probability sample of Washington State birth certificates.

Each PRAMS respondent receives an analysis weight, which is equivalent to the number of mothers that she represents in the population. The analysis weight is the product of three subcomponents: sampling weight, nonresponse weight, and frame noncoverage weight.² An

analysis weight of zero was assigned to mothers who did not respond to the PRAMS questionnaire.

- i. Sampling Weights. The sampling weights adjust for the effect of the sampling design. The sampling weights are calculated by dividing the number of mothers on the sampling frame for a given stratum by the number of mothers sampled for that stratum. This weight is the reciprocal of the sampling fraction for the sample, in each sampling stratum. Failure to apply sampling weights to the data may result in biased population estimates.
- ii. Nonresponse Weight. In PRAMS, four ethnic minorities are oversampled, to increase their numbers for analysis in this survey. Survey response rates vary by sampling stratum. The nonresponse weight is the ratio of the sample size in a stratum-specific response category to the number of respondents in the same category. The rate of response within a given stratum determines the magnitude of adjustment for nonresponse. Nonresponse weighting is conducted by increasing the weight of respondents that are similar to nonrespondents on known birth certificate information. From previous analyses of the 1993-1994 Washington State PRAMS survey, even after nonresponse adjustment is performed, PRAMS estimates may underestimate population risk for some measures because higher-risk women are less likely to respond even within groups distinguished by nonresponse.

Frame Noncoverage Weight. Each year, Washington State sends the calendar year birth tape to CDC where it is compared to the frame files for that given year of births. Frame noncoverage weights are created to adjust for omission of birth records in the sampling frame. The effect of the frame noncoverage weight is to ensure that the totals estimated from the sample data are similar to the totals from the birth tape.

Estimating Standard Errors for PRAMS Data

The standard error is a measure of the average deviation of summary statistics (means, proportions, rates) around their mean.³ Differential probabilities of selection increase the sampling error when estimating population parameters over aggregated sampling strata.²

To account for the complex sampling design of PRAMS, the Washington State Department of Health and the CDC recommend using the statistical software packaged "Software for Survey Data Analysis" (SUDAAN). SUDAAN was developed by the Research Triangle Institute in collaboration with the National Center for Health Statistics and other Public Health Service agencies. It uses first-order Taylor series approximations to calculate sampling variances and standard errors for the population estimates. Standard errors are used to calculate 95% confidence intervals (CI = percentage + (1.96 * standard error)). 1,4

In the 1996-1998 Washington State PRAMS Surveillance Report, 95% confidence intervals are presented for all population estimates. Confidence intervals that overlap indicate that the sampling values of the strata being compared are not statistically different from each other, and are unable to support inference that the population estimates of those strata are in fact different.²

Confidence intervals estimate the range of values, which includes the true population estimate for that indicator.^{1,4} However, confidence intervals can not be used to determine other possible sources of bias in an estimate, such as non-response bias, recall bias, failure to understand questions, and socially approved response bias.²

Recall Bias

PRAMS data are self-reported and are based on events and feelings of women surveyed that may have occurred more than a year prior to the implementation of the survey. Recall bias may occur if the respondents do not accurately remember prior events. Events that occurred before conception or early in pregnancy will tend to be more misreported than events that occurred near to the time that the PRAMS survey was completed. Survey respondents may also be less likely to report or may deny socially disapproved behaviors (e.g. smoking and drinking during pregnancy) in order to minimize involvement with this risky behavior. Therefore, PRAMS data regarding smoking and drinking behaviors may be underreported as most pregnant women are warned about the effects of exposing the fetus to tobacco and alcohol.²

References:

¹ Pregnancy Risk Assessment Monitoring System (PRAMS): CDC Model Surveillance Protocol 1999. Maternal and Child Health Assessment Section, Community and Family Health, Washington State Department of Health, 1999.

² Pregnancy Risk Assessment Monitoring System (PRAMS) Surveillance Report: 1993-1994. Maternal and Child Health Assessment Section, Community and Family Health, Washington State Department of Health, 1996.

³ Rosenburg D and Handler A. Descriptive Epidemiology and Statistical Estimation, In: Analytic Methods in Maternal and Child Health, Handler A., Rosenburg, D., Monahan, C., and Kennelly, J. (eds.), Maternal and Child Health Bureau, HRSA, DHHS, 1998.

⁴ Colley Gilbert B, Johnson CH, Morrow B, Ahluwalia IB, Gaffield ME, Fischer L, Rogers M, Whitehead N. PRAMS 1997 Surveillance Report. Atlanta, GA: Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 1999.

Table 3.1: Survey Response Rates

				Non-	Non-
Maternal	Total	Respondents	Respondents	Respondents	Respondents
Characteristics ^a	Surveyed	(N)	(%)	(N)	(%)
Total	8,563	6,034	70.5	2,529	29.5
Maternal Age					
<20 years	1,431	1,021	71.3	410	28.7
20-24 years	2,325	1,557	67.0	768	33.0
25-34 years	3,992	2,876	72.0	1,116	28.0
35+ years	813	579	71.2	236	28.8
Missing	2	1	50.0	1	50.0
Race/Ethnicity					
White	1,712	1,410	82.4	302	17.6
African American	1,551	969	62.5	582	37.5
Native American	1,970	1,252	63.6	718	36.5
Asian/Pacific Islander	1,713	1,208	70.5	505	29.5
Hispanic	1,617	1,195	73.9	422	26.1
Missing	0	0	0.0	0	0.0
Maternal Education ^b					
<12 years	2,095	1,323	63.2	772	36.8
12 years	2,449	1,717	70.1	732	29.9
>12 years	2,923	2,331	79.8	592	20.3
Missing	1,096	663	60.5	433	39.5
Marital Status					
Married	5,114	3,842	75.1	1,272	24.9
Unmarried	3,433	2,181	63.5	1,252	36.5
Missing	16	11	68.8	5	31.3
Medicaid Status					
Medicaid ^c	4,874	3,201	65.7	1,673	34.3
Cash Assistance ^d	1,955	1,137	58.2	818	41.8
Pre-First Steps (FS) Medicaid Only ^e	1,845	1,266	68.6	579	31.4
First Steps Expansion ^f	1,074	798	74.3	276	25.7
Non-Medicaid ^g	3,658	2,817	77.0	841	23.0
Missing	31	16	51.6	15	48.4
Baby's Birth Weight (grams)					
Low Birth Weight (<2500 g)	541	355	65.6	186	34.4
Normal Birth Weight (>2500 g)	8,000	5,664	70.8	2,336	29.2
Missing	22	15	68.2	7	31.8

^aMaternal Characteristics: age, race/ethnicity, education, marital status, baby's birth weight obtained from Washington State birth certificates; Medicaid status from linkage with Washington State First Steps Database; and prenatal care sites from PRAMS. White includes other/unknown (3.5%).

^b10% or more of the Maternal Education data are missing from birth certificate data.

^cMedicaid - women on Cash Assistance, Pre-First

^dCash Assistance - very low income women (below 65% of the federal poverty level) eligible for cash assistance and Medicaid.

ePre-First Steps (FS) Medicaid Only - low income women (below 90% of the federal poverty level) eligible for Medicaid Only.

This group includes women not eligible for cash assistance.

^fFirst Steps Expansion - women eligible for Medicaid with incomes below 185% of the federal poverty level, but not in the Cash Assistance or FS Medicaid Only groups.

⁹Non-Medicaid - women not enrolled in Medicaid.



Technical Notes

Below are the topics covered in volume one through four of the 1996-1998 Washington State PRAMS Surveillance Report:

Vo	olume I
	Folic Acid Awareness
	Pregnancy Intention and Birth Control Use
	Prenatal Care
	Hospital Stays for Labor and Delivery
	Breast-feeding
Vc	olume II
	Tobacco Use and Infant Exposure to Cigarette Smoke
	Alcohol Use
	Illegal Drug Use
Vc	olume III
	Selected Maternal Risk Factors Discussed by Prenatal Health Care Providers
Vc	olume IV
	Physical Abuse Around the Time of Pregnancy
	Infant Safety
	Infant Sleep Position
	Stress and Social Support

States Participating in PRAMS from 1996-1998

Alabama Louisiana Washington Alaska Maine West Virginia

Arkansas New Mexico

Colorado New York (excluding NYC)

Florida North Carolina Georgia Oklahoma Illinois South Carolina

For more information on PRAMS programs in other states, please contact the Centers for Disease Control and Prevention (CDC) at:

http://www.cdc.gov/nccdphp/drh/srv prams.htm.

Web Sites

CDC PRAMS web site: http://www.cdc.gov/nccdphp/drh/srv prams/

Washington State PRAMS web site: http://www.doh.wa.gov/cfh/prams/

Washington State Department of Health website: http://ww.doh.wa.gov/

Note: The Washington State PRAMS Surveillance Report – Volume III will be available on the Washington State Department of Health web site by July 2002.